

# THE TARTAN



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The Tartan

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Carnegie Mellon's Student Newspaper Since 1906

## CMU libraries almost out of storage space



Adam Tunnard/Staff Photographer

Hunt Library has been dealing with an increase in classroom and study space at the expense of storage space for their physical collections.

**MATTHEW BENUSA**  
Editor-in-Chief

In the early 2000s, Carnegie Mellon began investing in an off-campus collection site for its libraries. According to a 2006 paper written by Carnegie Mellon librarians Susan Collins, Linda Dujmic, and Terry Hurlbert, the planning for off-site storage began in 2002. Numerous options were considered: creating additional stacks for books, which would limit space; weeding out (reselling or recycling) books, which wouldn't solve the

space problem; and the eventual solution, adding an off-site collection.

Almost twenty years since the first off-site planning began, the library system is running out of space again. Currently, the total capacity of Hunt Library is half a million volumes, and it is considered to be at full capacity. Other on-site locations, like Sorrells Library and the Mellon College Library, are considered to be at capacity, too. The off-site collection, at another half a million volumes, was projected to be at capacity after twenty

years of use, starting around 2006. The paper from librarians Collins, Dujmic, and Hurlbert, reads, "The off-site facility was designed to be constructed in phases. Half is complete and will house approximately 225,000 volumes, meeting our storage needs for ten years."

According to Alicia Salaz, Associate Dean of Research and Academic Services, "there are currently approximately half a million volumes at the off-site Penn Ave facility — with space

See **LIBRARY**, A3

## CMU's largest hackathon held on Valentine's Day

**NORA MATTSO**  
Chief Technology Officer

More than 400 students participated signed up for TartanHacks, committing themselves to a 24-hour-long hackathon beginning on Valentine's Day. Though the emcees at the opening ceremony "guaranteed" that none of these participants would be single by the end of the Feb. 14 - 15 competition, the only certain outcome was the 51 projects that were submitted the next day.

Hacking was scheduled to begin at 6 p.m. on Friday, with participants spreading out over the Cohon Center and the Gates-Hillman Center to work in teams of around four, on projects that were to be submitted the next day at 4:30 p.m.

The organizers, ScottyLabs, offered a grand prize of \$2,000 named in honor of Scott Krulcik, a ScottyLabs member who passed away in 2018 shortly after graduating from Carnegie Mellon.

The event sponsors set challenges for the students. Emirates, the only diamond level sponsor, asked students to spend their Valentine's Day working on three separate challenges. The winning team, EmiratesXR, developed a system integrated with the Emirates app to communicate with and allocate agents in the Dubai airport. They won a two-day-long trip to Dubai, where they will present their hackathon project to Emirates management.

Other sponsors included

See **HACK**, A3



Courtesy of TartanHacks

Students get tote bags, stickers, and shirts before the start of the campus' biggest hackathon.

## Walking To The Sky is missing a person. Where'd he walk off to?

**NATHANIEL RICHMOND**  
Staffwriter

Over the past 13 years, the 100-foot stainless steel pole in front of Warner Hall has become a distinctive part of Carnegie Mellon. The people who 'walk up to the sky' command the attention of anyone entering Carnegie Mellon from Forbes Avenue, often the first thing visitors see on campus. But since winter break, *Walking to the Sky* has been missing one of its pieces.

One of the men at the base of the sculpture, made by Carnegie Mellon alum Jonathan Borofsky, is gone, leaving the child he typically holds hands with giving an awkward wave. Only a patch of dirt marks where he once stood. The missing man has garnered a fan account on Instagram, but students do not seem to know his location.

It is just another small turn in the story of *Walking to the Sky*, as the sculpture has previously had some missing parts. In Oct. 2009, three years after the statue was installed, The Tartan reported that the statue had "swayed several feet back and forth." At that time, most of the figures on the pole were removed while the statue's replacement was built. Shortly after, the statue was disassembled, and eventually replaced with the tapered pole that remains on campus today.

However, this time only one of the figures of the statue has been removed, and the statue is not due for any replacement. Despite his absence from the sculpture, College of Fine Arts Dean Dan Martin made it clear to The Tartan that the figure is fully accounted for. "From time to time, outdoor public art pieces need touching up," he said, "Since 2006, several of the figures of *Walking to the Sky* have been removed for repairs or refreshing."

Dean Martin has chaired the Public Art Committee (PAC), which approves public art like *Walking to the Sky*, since his appointment as dean in 2010. The committee reviews proposals and gathers feedback on the campus' public art "with the purpose of recommending to the president" whether proposals should be approved, according to the university's public art policy. The committee does not



Adam Tunnard/Staff Photographer

The young man who usually holds hands with *Walking to the Sky*'s currently missing figure holds a rose, placed in his hand on Valentine's day.

oversee maintenance or repairs for public art, but it was instrumental in the process of getting *Walking to the Sky* on campus.

The PAC was established in Feb. 2006 because of controversies involving the statue. The original *Walking to the Sky* was built in the Rockefeller Center in New York City in 2004 and later moved to the Nasher Sculpture Center in Dallas, Texas. Alumni Jill and Peter Kraus, who also donated towards the Kraus Campo (better known as the "Numbers Garden"), donated the funds for Carnegie Mellon to build a replica of Borofsky's Dallas *Walking to the Sky* on campus in 2005. The statue was originally planned to go between Baker and Doherty Halls.

The sculpture's presence on campus has been controversial from the start, with some students, (like the Editorial Board at The Tartan), questioning the decision and complaining that they were being left out of the decision-making process. Though the statue was already approved to be built on campus, the creation PAC was proposed by former Dean of the College of Fine Arts Hilary Robinson as part of a compromise so students could give input on campus art.

The committee then held a forum on the site of the statue. The Tartan Board reported in March 2006 that the committee got "a chorus of 'no's'" when they asked if the audience approved of its site in front of Warner Hall. However, Robinson claimed in an interview with The Tartan that she had the audience's support in recommending that site to former Carnegie Mellon President, Jared Cohon.

Despite the controversy, university officials and Borofsky were glad to finally bring the statue to campus permanently. President Cohon said at the time, "We are delighted that it has come to our campus and are grateful to Jonathan Borofsky and to Jill and Peter Kraus for making this possible."

With an already convoluted history, the disappearing statue is really just a small part of the campus fixture's story. As for the missing figure, Martin says, "I expect the young man will be back in place very soon."

FEATURE PHOTO

# CMU VP of Finance Angela Blanton speaks at Leadership Conference



Angela Blanton, Vice President of Finance for Carnegie Mellon, delivers the opening keynote address at the 2020 Leadership Conference on Empowerment and Wellness, an annual event hosted by the Tepper Women in Business Club. Courtesy of the Tepper School of Business

## Crime & Incident: Feb. 1–7

### Disorderly Conduct

Feb. 11, 2020

Officers responded to Wean Hall after hearing a report of an Aramark employee being disorderly. Officers arrived and made contact with witnesses, who were able to positively identify the individual. Due to the nature of the incident, charges were filed via summons.

report of an individual unlawfully taking art supplies and creating an exhibit within another Carnegie Mellon student's work space.

transported to the hospital. City of Pittsburgh Police are conducting the investigation.

### Retail Theft

Feb. 13, 2020

Officers responded to Au Bon Pain after an employee filed a report involving a retail theft. The Carnegie Mellon student responsible was identified, and paid for the items taken.

### Hit and Run

Feb. 14, 2020

A Carnegie Mellon student reported a vehicle hit and run on Frew Street behind Hunt Library.

### Retail Theft

Feb. 12, 2020

Officers responded to Entropy after an employee reported a retail theft. The investigation is ongoing.

### Vehicle Accident

Feb. 14, 2020

Officers responded to the intersection of Fifth Avenue and Amberson Avenue after a Carnegie Mellon student was struck by a vehicle. Officers arrived and made contact with the student, who was

### Theft, Suspicious Person

Feb. 12, 2020

Officers responded to the College of Fine Arts following a

## WEATHER

Source: [www.weather.com](http://www.weather.com)

### TUESDAY



48° / 28°

### WEDNESDAY



37° / 22°

### THURSDAY



29° / 17°

### FRIDAY



37° / 21°

### SATURDAY



45° / 29°

### SUNDAY



48° / 21°

Compiled by  
**ADAM TUNNARD**

## SOCIAL ACTION CALENDAR

# FORWARD!

a few of this week's activism opportunities at Carnegie Mellon

SUSTAINABLE LOCAL UNIVERSITIES LUNCH & LEARN PANEL DISCUSSION

12:00PM - 1:30PM, COHON

feb.

19

✊

NAOMI ORESKES PRESENTS: "WHY TRUST SCIENCE?"

5PM - 6PM, PORTER HALL 100

feb.

20

### Corrections & Clarifications

If you would like to submit a correction or clarification, please email The Tartan at [news@thetartan.org](mailto:news@thetartan.org) or [editor@thetartan.org](mailto:editor@thetartan.org) with your inquiry, as well as the date of the issue and the name of the article. We will print the correction or clarification in the next print issue and publish it online.



# CMU Libraries face spatial trade-off

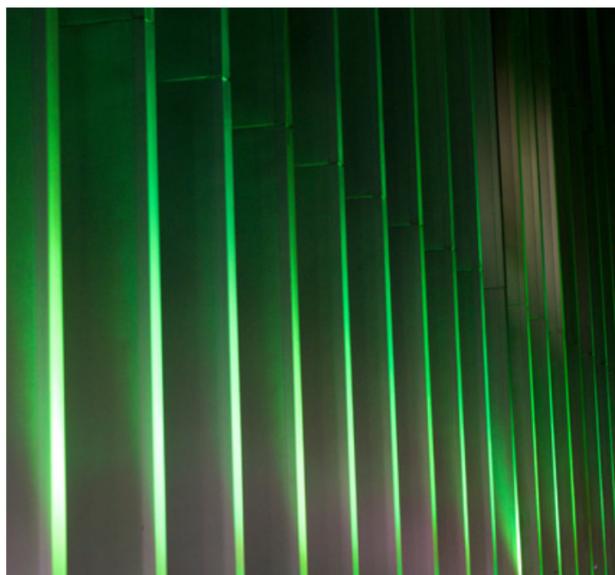
LIBRARY, from A1

for another 40,000 or so items. This is not a lot of wiggle room.” The lack of space for the library puts them in almost the same position as they were in nearly twenty years ago, with space running out for better, higher-value collections. Salaz wrote in an email to The Tartan, “our near-to-midrange collections strategy, therefore, has to consider either expanding the space available, discarding low-value collections to make room for new, higher-value collections, or a combination of these.”

The library system will have to either add new stacks at the expense of student study space, weed out books at the expense of losing lower value books, or increase off-site storage space.

Last week, The Tartan reported that the library system is not interested in increasing the physical presence of collections on campus. The priority for on-site space has been student study space and classroom space. Recent renovations in Hunt Library and Sorrells Library are examples of the library’s priority for student study space. According to gate counts at Hunt and Sorrells libraries provided by Salaz, the number of students to visit Hunt Library in Sep. 2013 was 88,902. In Sep. 2019, there were 72,125 visitors to Hunt Library. Sorrells Library saw 37,505 people in Sep. 2013 and 58,201 in Sep. 2019.

Weeding out books is also a limited option. Sometimes, weeding out books means sending them to the off-site collection, but when space is an



Hunt Library, and other campus libraries, are running out of space for physical collections. Courtney Wittekind/Staff Photographer

issue, books are discarded. If the books are in good condition, they will be sold to Better World Books, and the revenue generated by the sale will be returned to fund the purchase of other collections. When books aren’t in good condition, they are recycled.

Collins, currently a senior librarian at Carnegie Mellon, wrote in an email to The Tartan about the process of weeding out books: “It probably should be an ongoing process, but often, due to other pressing responsibilities, it waits until space becomes a bit of an issue and then we usually have a weeding project. Many of us do some small amounts of weeding throughout the year (if we notice superseded editions on the shelf, books in bad condition, etc.). Recycled

books are usually those with little or no circulation and in poor condition (missing or torn pages, ripped covers, etc.). Books sent to Better World Books are those with little or no circulation that no longer match with our research and teaching needs, or, for whatever reason, no one wanted to read.” Currently, there is no option for the library to gift or sell the books to students or employees of the university.

With space running low in the off-site collection, the library will have to decide how to move forward in the next few years. They’ll have to decide which collections are most valuable to the research interests of the university, which collections can be sold off, and which collections can be recycled.



## Why Trust Science?

Dr. Naomi Oreskes

Professor of the History of Science and Affiliated Professor of Earth and Planetary Sciences at Harvard University

Thursday, February 20 | 5:00-6:00 PM  
Porter Hall 100 (Gregg Hall)

Dr. Oreskes will be available to sign copies of her book, *Why Trust Science?*, from 2:00-3:30 pm on Thursday, February 20, in the CMU Bookstore, Cohon University Center (1st floor)

Carnegie Mellon University  
Dietrich College of Humanities  
and Social Sciences

VISITING  
SCHOLAR  
PROGRAM  
The PHI BETA KAPPA Society



# 51 teams turn in projects in TartanHacks hackathon



Top two photos: Students talk to job recruiters from hackathon sponsors in Rangos Ballroom. Bottom: a hackathon team works on their project, snacks in hand, in the Cohon Center. Courtesy of TartanHacks

HACK, from A1

large companies like Facebook, Microsoft, and Dick’s Sporting Goods, tech companies like Rockwell Automation, Nefeli Networks and Ness Digital Engineering, and even government agencies like nuclear weapons research facility Sandia National Laboratories. These sponsors offered prizes like speakers, Echo Shows, and Amazon gift cards for categories like best financial hack, or best security hack. They also used the hackathon to recruit attendees, advertising internship and job openings.

Some of the prizes focused on the goals of the projects in question. When it comes to social good, Principal Program manager Justin Garrett, who led a talk on “AI for Good” during TartanHacks, said, “we believe that technology is the ‘how,’” and that the solutions students come up with during these hackathons are the “‘what’, or the idea.” Microsoft Senior Regional Program Manager Nitya Narasimhan reinforced the importance for the company of staying connected to students and developers in the Pittsburgh region.

Many teams were not thinking about the challenges as they decided what to work on for the next 24 hours. “We came without thinking about any of the prizes,” said Karissa Prayogo, a senior in science technology and international affairs, who traveled from Georgetown with her friends with the idea for their project, Flashpopz. Instead, she and her friends came because “the hackathon would be a good place to carve out time” to work on the app, which seeks to teach Japanese using vocabulary from anime episodes.

Though they did not set out with their sights on any prize, the Flashpopz team was selected to give a final presentation at the closing ceremonies, and they won the Microsoft “Hack for Good” prize, winning Surface Gos and \$1000 for a charity.

First-years were the largest group at the hackathon, accounting for 195 out of the

475 registered. “I’ve never done [a hackathon] before, so this is to see how it goes,” said first-year Maggie Huang, whose team won Nefeli Networks prize for “Best Environment Hack.” The experience, said Huang, was “simultaneously very fun and very frustrating,” but the process was made easier by the “very helpful” mentors roaming around and assisting teams.

Edward Garemo, a first-year in computer science, joked that he participated in the hackathon because they were “told we’d find love.” His teammate, Sean Swayze, a first year in economics, piped up that it hadn’t worked because they had spent 18 hours in the Class of ‘87 room in the UC working on their project.

More seriously, Garemo said that they were there because they wanted to take advantage of the computer science resources to work on their project, Crossword Solver, where they attempted to use new data structures and heuristics to tackle the much-attempted challenge of automatically solving crossword puzzles.

“No one else has cracked it, so it would be somewhat arrogant to believe we could do it in 24 hours,” said Garemo, referencing the many academic papers that have been published attempting to crack the problem. The “First Penguin Award,” inspired by one given out in Randy Pausch’s classes for the most “glorious failure” made Garemo believe, “if you try something and really fail, there is still an opportunity for you to win.” Crossword Solvers did eventually win the First Penguin Award, getting stuffed penguins along with another team, T.A.C.O.

The Scott Krulcik prize was awarded to InSights AR, a team that developed an AR headset that identified people from profiles and displayed their names to “figure out who they are without actually meeting them,” said team member and sophomore SCS student Audrey Tzeng. Their project is intended for large business meetings or conferences.

The closing ceremony ended with attendees sharing a large TartanHacks branded cake in McCormy Auditorium.

# Forum

FROM THE EDITORIAL BOARD

## HB1100 disregards our future

On Feb. 5, the Pennsylvania State Senate voted to send HB1100 to Governor Tom Wolf, who is expected to veto the bill. HB1100 would grant petrochemical companies in Pennsylvania a conditional tax break. Any company receiving the credit must redevelop a brownfield site which would be the location of the factory, extraction site, or nominal manufacturing site. They would have to use Pennsylvania natural gas in their operations, make good faith efforts to employ local construction workers, and provide those workers with a fair wage (rather than the going wages for construction workers in the area). Additionally, the capital investment in the project receiving the tax credit would have to be at least \$450 million.

The tax credit, which will likely be used to attract a very small number of very wealthy corporations, will almost certainly become law as both chambers of the PA State Legislature voted with a veto-proof supermajority. Numerous rural Democrats and independents voted for the bill, which follows the same path of a similar tax credit that attracted Shell Oil to build a cracker plant in Beaver County. There's an established pattern in the state legislature where the legislators give a tax credit to a single corporation to build one plant in Pennsylvania. That plant will provide a few hundred permanent jobs and a few hundred construction jobs. Most people in Pennsylvania would see little benefit.

For such a massive tax credit, it's shocking that so little money will enter into the Pennsylvania economy (in the case of the

Shell cracker plant and HB1100). Few people will see any gain in income, especially in the long term, as a result of either measure.

There are no legally binding commitments to renewable energy made in HB1100. However, HB1100 would force the corporation involved to redevelop brownfield sites, which are sites of previous manufacturing companies that left the land unusable. Often, brownfield sites are the former locations of slag heaps, petrochemical dumping, or plastics manufacturing. Essentially, these companies who plan to use the tax credit provided by HB1100 are planning to heal the brownfield site by putting another manufacturing site on the land that would only destroy it, again.

This is just one in a series of commitments made by state and local governments to maintain the status of natural gas production, even when renewable sources are the future of energy production. With the cost of renewable energy going down, many people are recognizing renewables as the sustainable future that the planet needs. Without renewables, the supposed geopolitical stability enforced by multinational corporations and intergovernmental organizations will falter. Many people will be put into direct lines of danger, and the corporations and their tax-break-creating governments will be at fault.

Amid all of the tax breaks and new construction is a web of monetary investment that implicates Carnegie Mellon as a proponent of natural gas. Neither Carnegie Mellon nor

the University of Pittsburgh has divested their oil and natural gas investments. Higher education in Pittsburgh is pushing the boundaries of our way of life by continuing to invest in fossil fuels that are altering the planet's climate beyond anything we as a species have ever seen. Carnegie Mellon claims to be such an innovative and forward-thinking school, running on the "OUTLAW" energy as outlined in the Brand guidelines. Yet the university is quite conservative about changing its investments, especially given the rapidly dropping costs of renewable energy production. Clean energy is not only a good investment, but it is also the only way to guarantee human survival beyond the next century. Every drop of fossil fuels we extract from the ground is another grain of sand dropping in the hourglass of humanity.

Not only do Carnegie Mellon's investments point toward a general disregard of humanity, but recent controversies, like the widely-reported racist map of Pittsburgh that excluded predominantly black neighborhoods, indicate a disregard for a more specific subset of humanity. Poor neighborhoods, which in the United States are disproportionately Black, bear the brunt of industrial pollution and the associated increased mortality rates. The rich, white owners and executives of fossil fuel companies benefitting from massive tax breaks and institutional investment, much like those institutions themselves, care nothing at all for the human lives burned in their quest for profit and expansion.

## A reflection on gun violence and policy

LINDSAY GLICK

Assistant Copy Manager

For 14-year-old Jaime Guttenberg, a gifted dancer, straight-A student, and aspiring occupational therapist, the possibilities seemed endless. But on Feb. 14, 2018, my family friend walked through the gates of Marjory Stoneman Douglas High School for the final time. She was just one of the 17 students and faculty members whose lives were claimed in the tragic Parkland, FL shooting.

Within the greater Pittsburgh community, we understand that gun violence can happen anywhere. On Oct. 27, 2018, a gunman opened fire in Pittsburgh's Tree of Life synagogue, taking the lives of 11 congregation members.

Eight months after losing a friend in Parkland, people who share my cultural heritage were slain in our hometown, forcing me to once again confront my ever-increasing proximity to gun violence. Two years after the massacres in Parkland and Pittsburgh, I am still processing the trauma as I reflect on our current gun policy.

Policymakers have yet to take adequate action in addressing the gun violence epidemic. As a result of political inaction, trends of gun violence have yet to slow down. Last year, there were 418 mass shootings in the United States, and 39,426 gun

violence-related deaths overall.

Unfortunately, albeit unsurprisingly, the Trump administration has been very lax on gun control policy. The current administration even reversed an Obama-era rule that barred some people with severe mental illnesses from buying guns.

The bill, which would have prohibited some 75,000 people from owning guns, was created in response to the shooting at Sandy Hook Elementary School. Though many studies have shown people with mental illnesses are not at high risk of harming others, people with mental illness are at much higher risks of self-harm. By nullifying this bill, Trump and his administration are enabling self-directed gun violence, a form of violence that claimed over 24,000 lives last year.

During Trump's State of the Union, a man named Fred Guttenberg shouted in response to the president's opposition to stricter gun laws. Guttenberg, who had become a gun safety advocate after the loss of his daughter Jaime, was subsequently escorted out of the event.

Guttenberg later apologized for his outburst, but he should not have had to. Two years after losing his daughter, Guttenberg had been forced to confront Trump's weak positions on gun safety—positions that may enable future mass shootings.

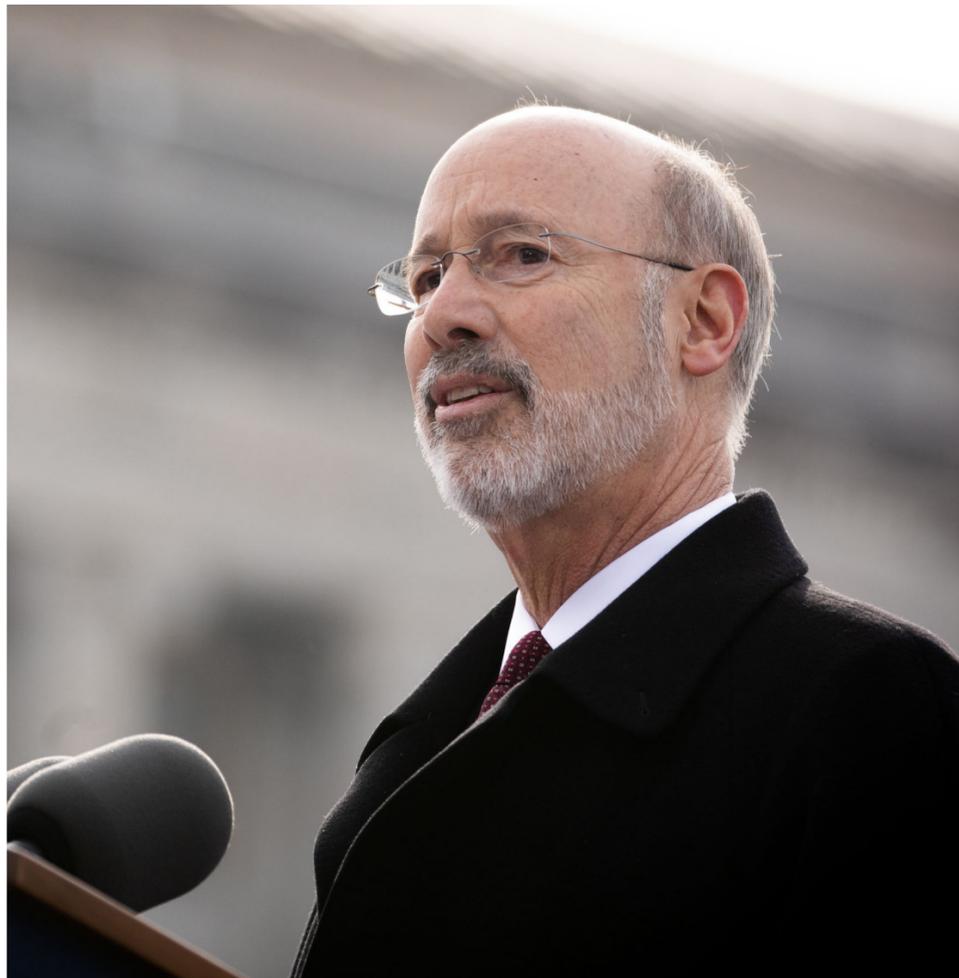
At the very least, the government should implement a total ban on the sale of assault rifles. The AR-15, the weapon used by mass shooters in both Pittsburgh and Parkland, can fire eight rounds in a single second.

Some advocates argue for universal background checks on all weapon purchasers. As it stands, the current background check process is not comprehensive enough. The Parkland and Pittsburgh shooters purchased their firearms legally, after undergoing federal background checks.

Stricter gun laws will not undo the Guttenbergs' grief or bring back the 17 slain in Parkland. Stricter gun laws will not stop me from looking over my shoulder for a gun every time I am in a crowded room. The damage to dozens of Parkland and Pittsburgh families has already been done. Should policymakers take the necessary steps to stop the sale of assault weapons, there is space for a future that is free of gun violence.



Paola Mathus/Staff Artist



Courtesy of Governor Tom Wolf via Wikimedia

Gov Tom Wolf (D-PA) is expected to veto HB1100, a bill that would give petrochemical companies a conditional tax break.

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## THE TARTAN

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# Progressives call for change



Courtesy of Gage Skidmore via Wikimedia

Even after former Democratic Presidential candidate Andrew Yang dropped from the 2020 election, “Yang Gang” perseveres.

*Sujay Utkarsh*

**SUJAY UTKARSH**  
Publisher

I have tried to stay away from talking about the elections and the Democratic nominees as much as I could. Then Andrew Yang dropped out, and I remembered that he was the only non-Bernie candidate I thought was okay, at best. Since then, Yang’s supporters, known as “Yang Gang,” have taken on a slogan similar to “Bernie or Bust,” albeit on a way smaller scale.

“Still Voting Yang” is something I’ve heard a lot from the Yang Gang, and it has drawn the ire of many Democrats who kept hounding them with the central phrase of this election: “vote blue no matter who.” They emphasized that voting for Yang is voting for Trump and compared them to “sour” Bernie supporters in 2016 who also helped the Democrats “lose” that election (they didn’t).

Now before I get into all that, I want to address Yang first. I can understand his appeal. His policies centered around “human-centered capitalism” are catchy. But “human-centered capitalism” is inherently an oxymoron. Capitalists’ top priority is their profits, and they only care about social costs when it gets them bad press. In many cases now, the bad press doesn’t even matter because they will make a profit anyway.

The other issue with Yang is that his policies are only a surface level fix for the fundamental failings of capitalism. His universal basic income plan is a great example of this. His goal is to use value-added taxes on corporations to then gain lots of revenue to give everyone \$1,000 a month. It’s not a bad idea, but it operates under the myth of consumer sovereignty. Essentially, people will know the best choices to make with the \$1,000 they get. But how is anyone supposed to know how to properly allocate their \$1,000 in a reasonable manner so that they can adequately pay for their housing, insurance, consumption,

transit, and many other costs?

\$1,000 is also not much, especially for people living in areas where the cost of living is very expensive. People in New York, San Francisco, or Chicago will not benefit as much from \$1,000 as someone in rural America. It’s a lot of taxpayer money spent on a plan that doesn’t do anything to address stagnant wages or rising healthcare costs among other things. Universal basic income is not that useful without taking those other costs out of the equation.

On the subject of healthcare, he supports the “spirit” of Medicare for All. Upon reading the policy, it’s better than the private with public option policy a lot of Democrats support, but it still doesn’t fix a lot. He wants to lower costs for drugs through price negotiations and pegging to other countries, which is good. But it doesn’t change the fact that private insurance is extremely costly, and his policy doesn’t say anything about guaranteeing affordable insurance. His position is one of compromise. There should be lower healthcare costs. However, Yang’s plan allows people to keep their private insurance plans that they supposedly like, and taking that away is “unrealistic.”

That’s the root problem of a lot of things: compromise. Yang was ultimately the best of the compromise crowd. At least he had a few meaningful reforms, like criminal justice with rehabilitation programs and some semblance of a publicly funded election mechanism.

But Democrats are doing their hardest to be both the party of the people and the party of the elite. Because of this, they compromise and bring about policies that don’t work and get easily sabotaged by Republicans, such as the Affordable Care Act. Then Republicans get to point fingers and say: “look, the government doesn’t work.” The pendulum then swings back towards their favor.

That’s all I can think of when I hear the “vote blue no matter who” line so early on in the election timeline. It would be one thing if the primaries were over and

we had a Democratic nominee. But every time someone like Klobuchar, Buttigieg, or Biden gets criticism for questionable policies and vague stances as a result of their corporate interest support, “vote blue no matter who” always gets thrown around. It’s especially used by establishment supporters to shut down progressives.

There is a reason why Yang voters want to vote for him in the primaries, even after he’s dropped out. I don’t think most of those people are saying they will write him in during the election, but they are using the primaries to indicate that they want some change from the norm, even if Yang only represents a compromised version of that change.

However, things aren’t going back to the way they were before. That status quo is what helped get Trump elected, so why not go for positive change where the working class is prioritized and healthcare, housing, transit, fair and free elections, the Internet, and many other things are fundamental rights? There is this strange resistance in the U.S. to change, fueled by the special interests of the corporate elite who have overemphasized their importance and perpetuated the myth that change is unrealistic and not stable.

It’s a shame the Democrat establishment is part of that. Michael Bloomberg, through millions of dollars of spending within the past few months, has managed to get himself to third place in some polls. If he becomes the nominee, progressives aren’t going to vote for him. What’s the point of “voting blue no matter who” when we’re just gonna vote for a richer re-skin of Donald Trump?

The whole point of why people are saying things like “Bernie or Bust” or “Still Voting Yang” is to show that people aren’t going to just sit back and accept some mediocre establishment favorite who kowtows to corporate interests. Bernie supporters, in particular, don’t want faux progressives who continue to compromise their positions to appease the establishment. Is it unrealistic to ask for better?

# Hollywood in need of a reality check

**ALEXIS TRBOVICH**  
Junior Staffwriter

The Oscars: Hollywood’s biggest, most glamorous night. A night where the brightest stars in film shine, questionable fashion choices are made (sorry Saoirse Ronan), and of course, someone has to get political.

Political speeches at awards shows are nothing new. Granted, they seem to happen more frequently in this politically divisive era, but they are no strange sight on the award ceremony stage.

This year, a handful of people did not hesitate to use the Oscars as a political platform. Brad Pitt, who won the Oscar for best supporting actor, made a quick but sharp jab at the Senate’s impeachment trial of President Trump: “They told me I have 45 seconds this year, which is 45 more seconds than the Senate gave John Bolton this week.”

Joaquin Phoenix, who won best actor for his lead role in *Joker*, also made a political speech. Rather than directly criticizing any specific person, he talked about commonalities in the fight against inequality: “We’re talking about the fight against the belief that one nation, one people, one race, one gender, or one species has the right to dominate, control, and use and exploit another with impunity.”

Phoenix also made political statements during his rambling, expletive-filled Golden Globes speech. He began by thanking the Hollywood Foreign Press for “recognizing and acknowledging the link between animal agriculture and climate change”, applauding them for making the evening’s meal entirely plant-based. He also urged his colleagues to show decisive action to stop the Australian wildfires and to take more responsibility for their actions, such as not flying in private jets to Palm Springs for the awards show.

The boldest political move of the Golden Globes came from host Ricky Gervais. He made it clear at the beginning of his monologue that he would hold nothing back during his last time hosting the event. A few bold sparks included calling the Hollywood Foreign Press Association racist for the lack of people of color nominated and calling Jeffrey Epstein a friend of Hollywood. He criticized Apple TV+ on how their hit *The Morning Show* revolves around doing the right thing, yet their company runs sweatshops in other countries. The fiery final minute of the monologue completely throws Hollywood under the bus: “If you do win an award tonight, don’t use it as a platform to make a political speech. You’re in no position to lecture the public about anything. You know nothing about the real world. Most of you spent less time in school than Greta Thunberg. So if you win, come up, accept your little award, thank your agent and your God and fuck off, okay?” Regardless of one’s opinion on politics or Hollywood, it was incredibly bold of Gervais to attack Hollywood on their home turf. While his criticism may seem outrageous and over the top, he sheds light on something

worth examining: hypocrisy in Hollywood.

Several Hollywood elites have come under scrutiny for not practicing what they preach, such as Leonardo DiCaprio. A visit to his Instagram will show you his passion for protecting the environment. He posts almost daily about various climate crises like the recent Australian fires, endangered wildlife, rising temperatures, and the need for cleaner energy. When he accepted his 2016 Oscar for *The Revenant*, he wasted no time in calling for action: “Climate change is real, it is happening right now. It is the most urgent threat facing our species, and we need to collectively work together and stop procrastinating.”

Yet his actions do not always match his words. Later in 2016, DiCaprio was seen taking a helicopter to his private jet to travel home from hosting his climate and biodiversity fundraising gala in Saint-Tropez. DiCaprio was also among travelers who took a combined total of 114 private jets to Google Camp’s three-day meeting to discuss topics such as climate change. The meeting took place last July at the Verdura Resort in Italy and cost Google roughly \$20 million. DiCaprio also reportedly used six private jets in six weeks in 2014 to travel between New York and Los Angeles.

Two-time Academy Award-winner Jane Fonda is another outspoken environmental activist. Fonda has been arrested multiple times in recent years for climate protests. Perhaps climate protests aren’t too stressful when you have 5,730 square feet of living space, three bedrooms, 6.5 bathrooms, and servants quarters to relax in afterward. Maybe she waved to some of the 50,000+ homeless people in Los Angeles on her way home.

This year, only one person of color was nominated for one of the 20 acting awards at the Oscars. African-American Cynthia Erivo received the Best Actress nomination for her role as Harriet Tubman in *Harriet* but lost to Renée Zellweger. For the award for best director, all five nominees were male. Coming from a corner of the world that preaches the importance of diversity, these nominations are not diverse at all.

In 2018, actor James Franco wore a “Time’s Up” pin to the Golden Globe awards, showing solidarity with the women of the #MeToo movement. However, Franco has been accused of sexual assault by five women, even before the pin incident.

These few incidents come from a long list of hypocrisy found among Hollywood. Many actors and actresses are openly liberal and support equality, denounce racism, and preach about climate change. Yet they mostly live in energy-consuming mansions, pollute the air with their private jets, and praise an academy that lacks diversity and representation in its nominees.

This begs the question: When an actor uses an award acceptance speech as a political platform, how seriously should we take them? Draw your own conclusions, but I say that Hollywood has to get in touch with reality.

forum@thetartan.org

# Carnegie Mellon University

## College of Engineering

### FALL 2019 DEAN'S LIST

#### FIRST-YEARS

Alexandria Adams	Christian Deem	Yike Han	Julie Shin Kim	Vikram Marmer	Omkar Savkur	Keying Wang
Nicholas Alvarez	Anais Del Rosario	Elena Harllee	Rex Kim	Sophie Mcgrady	William Seo	William Wang
Colton Amos	Martinez	Tyler Harp	Tae Hoon Kim	Raj Mehta	Sandra Serbu	Diana Warren
Carmen Andrade	Oluwafayosola	Leo Hasher	Roger Lacson	Alayna Mikush	Qiaoran Shen	Brandon Wei
Joseph Ayala	Dosunmu	Xiao He	Aaron Lao	Andres Montemayor	Jian Shi	Karen Whirley
Mukundh Balajee	Yining Duan	Haoyang He	Jason Ledon	Nicholas Murolo	Eshita Shrawan	Eli Wirth-Apley
Elizabeth Barre	Ravi Dudhagra	Grayce Henderson	Raehyun Lee	Mathea Myhrvold	Raaga Singireddy	Kelly Woicik
Theodore Bates	Sydney Dunn	Christopher Hess	Charlotte Lee	Kian Nassre	Jacob Smith	Brian Woolley
Abigail Berger	Sajal Duppatla	Alice Ho	Yerim Lee	Kyle Newman	Karen Song	Ming-Yang Wu
Nisha Bhargava	Jasmine Fahrenkrug	Ji Yeon Hong	Samuel Leong	Leo Nicolussi	Lev Stambler	Chu Chuan Wu
Vedant Bhasin	Lauren Familetti	Hannah Hong	Francine Leung	Anisha Nilakantan	Sarah Stapleton	Mason Xiao
Gabriel Blanco	Terry Feng	Thomas Horton King	Chao Li	Bailey O'malley	Elinora Stoney	Alex Xie
Miguel Brandao	David Feng	Yan Hsu	Ziyu Li	Seiya Otani	Alexander Strasser	Kevin Xie
Haoyang Cai	Riley Forster	Rejoice Hu	Yicheng Li	Iris Pan	Jocelyn Su	Jeanie Xu
Zhongyi Cao	Eli Fox	Claire Hu	Yihong Li	Shuailin Pan	Hance Su	William Yan
Fiona Carcani	Chi Gao	Yixin Huang	Kacy Liang	Prithu Pareek	Sathya Subramanian	Jennifer Yang
Christopher Chang	George Gao	Allison Hunter	Peiqi Liu	Rohan Parekh	Aleksander Tarczynski	Henry Yi
Shize Che	Aaron Garrison	David Ethan Hwang	Gregory William Liu	Aidan Pinto	Michaela Tecson	Serena Ying
Akshay Chekuri	Dianne Ge	Anju Ito	Andrew Liu	Anish Pispapati	Anjali Thontakudi	Anna Yu
Rubin Chen	Larry Geng	Nicole Jani	Kevin Liu	Aditti Ramsisaria	Andrew Thrasher	Bohan Yu
Jinqi Chen	Samantha Giordani	Lauren Janicke	Jason Lu	Vamsikrishna	Joshua Tsai	Hannah Zhai
Larry Chen	Jack Girel-Mats	Max Jantos	Ziyao Luo	Ratnakaram	Chalisa Udornpanyawit	Lingxi Zhang
Tianyue Chen	Alejandro Gonzalez	Xiao Jin	Xinyi Luo	Rachel Ratnam	Isabel Vala	Rita Zhang
Erica Chiang	Lazaro	Shivank Joshi	Anita Ma	James Ray	Matthew Wagner	Yuxuan Zhu
Connor Clark	Sachit Goyal	Patrick Joyce	Zoe Magnelia	Sergio Rodriguez	Aidan Wagner	
Emerson Collins	Matthew Grzybowski	Ankita Kalkar	Dante Mancini	Jaime Romero	Casey Walker	
Seaver Dahlgren	Ryan Guan	Sierra Kanofsky	Rebecca Manley	Philothei Sahinidis	Zipiao Wan	
Rowan De Boer	Ayesha Gupta	Jonathan Ke	Warwick Marangos	Lauren Sands	Tianqi Wang	

#### SOPHOMORES

Nicholas Acuna	Ketong Chen	William Foy	Shifali Kerudi	Madison Lui	Sophia Paul	Darwin Torres Romero
Ashwin Adulla	Annie Chen	Andrew Ruichen Fu	Justin Kiefel	Jai Madisetty	Sophia Pratto	Neeharika Vogety
Chantal Elise Alano	Jonathan Cheng	Neel Gandhi	Jeremy Klotz	Ranjan Mahanth	Stephen Pupa	Lily Wang
Tahlia Altgold	Sharon Chu	Siddharth Girdhar	Jack Koscho	Greta Markey	Zhengyu Qiu	Ethan Wang
Grace An	Sabrina Chua	Alexander Glass	Kelby Kramer	John Martins	Huahan Qu	Xiran Wang
Caio Augusto Araujo	Melinda Cornwall	Mehar Goli	Victoria Kuo	Diva-Oriane Marty	Atul Raghunathan	Emily Wang
Vivian Beaudoin	Richard Dauksher	Zhengze Gong	Judson Kyle	Skylar Mcauliffe	Lynn Rushkin	Erin Westberg
Esther Bedoyan	Donald Decaro	Vasilisa Gorbolskaya	James Kyle	Meghan McGraw	Tushhar Saha	Breyden Wood
Elizabeth Bell	Saisiddarth Domala	Andy Guo	Michalina Lacheta	John Mcmonigal	Keshav Sangam	Kelly Xiao
Anoop Bhat	Keaton Drebes	Yuxin Guo	Alice Lai	Grayson Moyer	Kristen Seballos	Denise Yang
Albany Bloor	Jeremy Dropkin	Anushree Gupta	Brian Lane	Umar Nasim	Cathy Shi	Carolyn Youstra
Ning Cao	Xingran Du	Rachel Hagani	Seung Yun Lee	Jonathan Nee	Sangbum Shim	Marcus Yu
Ludi Cao	Karin Dyer	Mae Hoad	Connor Leemhuis	Raymond Ngo	Ashley Shu	Joe Chuen Yu
Daniela Castleberg	Mansour Elsharawy	Mithril Hugunin	Aaron Li	Yuxiang Nie	Arushi Singh	Miao Ao Yu
Chun Yiu Jesse Chan	Summer Faille	Ethan Husted	Xingyang Li	Lily Oberman	Yee Aun Tan	Joshua Zapanta
Amelia Chan	Grace Fieni	Rahul Joglekar	Kaylee Liang	Aidan O'donnell	Yu Tian	William Zhao
Alfred Chang	Sara Fisher	Shreya Kadi	Dylan Linstedt	Shitong Pang	Nicholas Toldalagi	Ruizhe Zheng
Esper Chao	Molly Fitzgerald	Adrian Kager	Aria Lorenz	Katelyn Parsons	David Topping	Ziyi Zuo

#### JUNIORS

Hiroko Abe	Lane Darby	Lindsey Helsel	Benjamin Lawson	Neha Nagpal	Eleanor Seiler	Owen Torczon
Emily Albergo	Augustine Duffy	Natalie Herrmann	Jenna Lee	Russell Orlick	Giancarlo Seixas	Isani Tripathy
Vivek Anand	Alvaro Elizondo Marin	Mathis Heyer	Madeline Leppa	Valentina Ortiz	Sanjana Shah	Maxwell Van Buskirk
Thomas Anderson	Madeline Evans	Brandon Hung	Jessica Lew	De Zarate	Alvin Shek	Ramgopal
Charlotte Andreasen	Daniel Farid	Elyana Hurst	Anna Li	Vedant Parekh	Jasmine Shen	Venkateswaran
Rashmi Anil	Mairin Flanagan	Andrea Hwang	Nanxi Li	Vashisth Parekh	Nicole Shi	Abigail Vesco
Charles Backman	Terrance Frey	Joseph Iacobellis	Paul Ligeti	Brenna Pellon	Aakash Shrivastava	Congyi Wang
Laura Baldacchino	Kevin Frey	Sharfin Islam	Xujin Liu	Vivienne Pham	Rachel Sin	Erin Wong
Diana Balta	Keya Ganatra	Dion Jakobs	Vincent Liu	Louis Plottel	Phillip Sin	David Xie
Kyle Bannerman	Juanyi Gao	Orinta Januta	Julia Lu	Sean Pogorelc	Ishita Sinha	Ziyi Xu
Nadine Bao	Lily Gido	Leo Jo	Julia Lui	Samuel Porcello	Nihal Sivakumar	Joseph Yankel
Fatima Basit	Benjamin Glaser	Nicholas Jones	Jeffrey Luo	Maxwell Rae Chu	Matthew Sloan	Ziwen Ye
Isabel Basow	Dominik Goldstein	Isabel Joyce	Teagan Malakoff	Abigail Rafter	Andrew Spaulding	Reid Yesson
Kayleigh Boyle	Yezhen Gong	Seema Kamath	Adriana Martinez	Erick Ramirez	Logan Stahl	Helen Yu
Sophya Breedlove	Maxwell Gonzalez	Matthew Karee	Aaron Mckenzie	Raveena Ravilla	Jacob Steele	Yang Yue
Alyssa Brown	Emma Graham	Claire Kenny	Stefanie Mcmillan	Valerie Reiling	Ryan Stentz	Zhifei Yuliu
Leon Chang	Edison Greer	Lekha Kesavan	Jay Milch	Emily Reinoso Jacome	Jason Stranko	Yuchi Zhang
Vincent Chang	Dylan Greynolds	Lori Kipp	Bram Miller	Nathan Roblin	Katherine Strickland	William Zhang
Rui Qi Chen	Jacob Gruza	Nathan Koch	Loic Montandon	Kalee Rozylowicz	Axel Sutter	Eli Zidel
Isabelle Chikanosky	Sarah Hamilton	Zachary Kowalewski	Lucian Montgomery	Scott Santoro	Saeed Syed	Zixuan Zou
Hojeong Chun	Joseph Hayes	Joseph Krempa	Nickia Muraskin	Daniel Scher	Stephanie Tam	
Rebecca Clancy	Shuhan He	Stuart Kusdono	Siddesh Nageswaran	Ellen Seeser	Richard Tang	

#### SENIORS

Noah Alexandroff	Arun Sriram	Adriana Goodman	Liming Liu	Vicki Ponarski	Rachel Sneeringer	Michael Wang
Zixi An	Chockalingam	Annette Guo	Yukun Liu	Nina Prakash	Talia Solomon	Tessa Weeden
Otitodilichukwu	Katherine Choy	Bowen He	Kristie Lord	Kenny Ramos	John Solomon	Meredith Wong
Anammah	Priscilla Chung	Sharika Hegde	Katherine Marcan	Arabella Reece	Chetan Somani	Eli Workman
Paul Anderson	Bryant Chung	Aidan Honnold	Joel Miller	Rachel Reolfi	Simone Steinf	Gwendolyn Wright
Gage Anderson	Connor Clayton	Tiffany Hsia	Scott Mionis	Anna Riegger	James Stumpf	Zheng Xu
Frank Andujar Lugo	Eliana Cohen	Jason Hsu	Vinay Mitta	Andrew Rosenfeld	Deanyone Su	Annie Yang
Anthony Attipoe	Amy Coronado	Michelle Karabin	Renee Morton	Linden Runels	Trenton Suddeth	Yuneil Yeo
Jiayu Bai	Kenan Danon	Anthony Kennon	Sarina Naphtali	Chandler Sabourin	Yun Qi Charyl Tan	Kayla Yew
Alexander Baikovitz	Anita Dash	Mia Keyser	Gillian Nolan	Nicole Samba	Richard Tang	Jessica Yin
Ishraq Bhuiyan	Griffin Della Grotte	Malek Khalifa	Laura Ochsner	Julianne Sanscartier	Grace Taylor	Shu You
Yutong Bi	Xiaoyan Dong	Ashika Koganti	Malia Okamura	Kylee Santos	Christian Teixeira	Jerry Yu
Joseph Brauch	Jiameng Du	Joshua Konopka	Kevin O'neill	Stephen Schollmeyer	Shuming Teoh	Ziyue Zhang
Taylor Brown	Quincy Eaton	Joon Kyung Koong	Chakara Owarang	Ranganath	Ian Tilton	Chun Ming Jeffr Zhang
Dhruva Byrapatna	Alexis Elliott	Hyukjae Kwark	Nicholas Paiva	Selagamsetty	Gabriel Torres	Joe Zhao
Yutian Cai	Mengying Fang	Nicholas Laikhram	Enes Palaz	Tara Sengupta	Hernandez	Jake Zimmer
Jingxi Cai	Emma Farrell	David Landi	Deepak Pallerla	Nelly-Raissa	Alana Toy	Jiaqi Zou
Nicholas Calzolano	Abby Fedus	Sojeong Lee	Mihir Paralkar	Setchie-Tchato	Jade Traiger	Joanne Zulinski
Therese Chan	Michael Fernandez	Joshua Lee	Emily Parks	Tanvi Shah	Isabella Vendetti	
Jocelyn Chan	Nikolai Flowers	Shanley Lenart	Alexander Patel	Ishan Shah	Adolfo Karim Victoria	
Kexin Chen	Sebastian Gamboa	Serris Lew	Maria Perez-Hickman	Gavin Shehan	Higueros	
Yuxiao Chen	Xining Gao	Xinyi Li	Dominique Petach	Yuyi Shen	Timothy Violino	
Sarah Chen	Ruohai Ge	Xinye Li	Danae Petroulakis	Katie Shi	Liam Walsh	
Lucy Cheung	Jacob Gobbo	Emmalyn Lindsey	Cameron Pitts	Shivani Shukla	Xingsheng Wang	

#### FIFTH-YEARS

Vineetha Bheemarasetty	Andrew Febrillet	Alisha Lokhande	Syed Mohideen	Krystal Suero
Isabelle Chevallier	Nicole Ho	Adriel Mendoza	Jeffrey Parker	Yishun Zhou
Alec Church	Gracia Lai	Gregory Miller	Liliana Santizo Deleon	

# Science & Technology

## Anti-photovoltaics generate power without sunlight

ATAHAN KILICCOTE  
Staffwriter

Solar cells, by definition, need sunlight—but not anymore. In an article published in the Jan. 2020 edition of journal ACS Photonics, University of California Davis electrical and computer engineering (ECE) Professor Jeremy Munday described an “anti-photovoltaic cell” that could generate up to 50 watts of power per square meter at night. To put this into context, a regular photovoltaic cell can generate between 150 and 200 watts per square meter. This new power source could have wide effects on both the climate battle and the stability of the energy grid.

Usually, photovoltaics work by absorbing light, causing a voltage to appear across the device, which then creates a flowing current. Anti-photovoltaics work not with light, but with heat. Instead of generating electricity from the input of light, these cells emit thermal radiation into the atmosphere, causing a negative voltage and a negative current while still generating power. Anti-photovoltaics must be kept relatively warm to generate power efficiently. Warm objects radiate thermal energy. That’s why, for example, we can use thermal imaging cameras to measure temperatures at a distance. Photovoltaic cells are made more efficient by staying cool, so a cooling system can increase the

generation of traditional solar cells by almost 10 percent. Anti-photovoltaics, on the other hand, as long as they are pointed away from the sun and kept warmer than their surroundings, can continue to produce power during the day.

Anti-photovoltaics could solve the issue of plaguing energy grids with large deployments of solar cells, common in California. Currently, a huge strain is created in the power grid when the sun sets and traditional photovoltaics go offline. This phenomenon is known as the “duck curve,” and it is a major concern for the California power grid. During sunset, gas power plants need to be quickly maxed out to meet demand and offset the drop in energy production. These “peaking units” are subject to incredibly high operations and maintenance costs, since they undergo massive stress when shifting from low to max generation in a short period of time. These hasty transfers can strain and congest the grid’s transmission systems. Anti-photovoltaics can offset this duck curve issue since their power generation increases as traditional photovoltaics begin to drop off. Anti-photovoltaics could produce high returns if they are able to fill this gap in power generation and capitalize on the inflated price of energy.

Panayiotis Moutis, a Systems Scientist at the Scott Institute for Energy Innovation who teaches



Courtesy of Thomas Kohler via Flickr  
Traditional photovoltaic cells generate between 150 and 200 watts per square meter, but they require sunlight to function.

a class in energy markets and power systems, commented about this new technology’s effects in an email to The Tartan. “The duck curve from photovoltaic power dropping out, would be, at best, 25% smoother and, even worse, under the optimistic assumption that all photovoltaics are replaced by anti-photovoltaics and that their power would peak immediately. Such a scenario would somewhat relieve gas or

other fast-responding units, but the problem would not go away. There does not seem to be a definitive path clearing away from this problem, despite, of course, the use of massive amounts of (still costly) battery storage acting as regulating buffers.”

Even though anti-photovoltaics represent a promising new perspective in energy generation, it seems that innovation in battery technology is the key to unleashing

their potential and solving the world’s energy difficulties. Like traditional solar generation, the impact of anti-photovoltaic developments might not reach society for another generation. Yet, Carnegie Mellon University, an institution leading the world in technological innovation, must remain optimistic while striving to explore a variety of solutions to existential issues like climate change.

## Neural nets analyze gene expression

SEAN MIN  
Staffwriter

Computer scientists at Carnegie Mellon University have used a common deep learning method used for facial recognition and other image-based applications, and applied it to learn more about gene relationships. The scientists represented large quantities of gene expression data in a graphical form that can be analyzed by convolutional neural networks (CNNs). CNNs are excellent at

**“CNNs, which were developed a decade ago, are revolutionary.”**

Ziv Bar-Joseph  
Professor, Carnegie Mellon University

analyzing visual imagery, so they can be used to make inferences about interactions between genes. The CNNs developed by the researchers are better for gene analysis than any made thus far.

A report concerning how CNNs can aid in the identification of genes related to genes and genetic and developmental pathways that drugs might target was published on Dec. 10, 2019 in The Proceedings of the National Science. Ziv Bar-Joseph, a professor of machine learning and computational biology at Carnegie Mellon, explained the applications beyond gene interactions for the new method,

called CNNC. Bar-Joseph and Ye Yuan, a postdoctoral researcher in Carnegie Mellon’s Machine Learning Department, co-authored the paper.

“CNNs, which were developed a decade ago, are revolutionary. I’m still in awe of Google Photos, which uses them for facial recognition,” Bar-Joseph said in a press release. “We sometimes take this technology for granted because we use it all the time. But it’s incredibly powerful and is not restricted to images. It’s all a

matter of how you represent your data.”

To fully comprehend human development or diseases, researchers must find out how genes work with one another in networks and complexes, as all 20,000 human genes function interconnectedly. These relationships can be inferred by observing gene expression, which represents gene activity levels in cells. For the most part, according to Yuan, if two genes are both active at the same time, they are interacting. However, it could be a mere coincidence or both could be activated by another gene.

Yuan and Bar-Joseph trained CNNs on single-cell expression data to analyze gene relationships. Single-cell expression data are taken from experiments that can discern the activity level of all genes in a given cell. The data from hundreds of thousands of these single-cell analyses were organized into a matrix or histogram. In this matrix, every cell serves as a representation of a different level of co-expression of some pair of genes. By representing the data in this manner, it more closely resembles an image, which CNNs can analyze better. The researchers used data from genes with already-established interactions to train the CNNs to detect the genes that were interacting and those that were not on the basis of the matrix’s visual patterns.

“It’s very, very hard to distinguish between causality and correlation,” Yuan commented. While the CNNC method’s effectiveness is limited by the quantity of gene expression data available, it proved statistically more accurate than existing methods. Yuan and Bar-Joseph expect CNNC will be one of several techniques that researchers will eventually deploy in analyzing large datasets. In the future, we could see CNNCs used to discern causality in all sorts of phenomena, from social networking to financial data.



# Swim and dive place top five at UAA Championships



Photo courtesy of Carnegie Mellon Athletics

Senior Emma Nicklas-Morris swam a career-best, school record-setting 2:03.43 200-yard butterfly as the Tartan men and women teams placed fourth and fifth at the UAA Championships, respectively.

## Tartans win close game 84-73

**BASKETBALL**, from A10

The Tartans seemed to come back from the break reinvigorated, however, and two free throws scored by McNeil, along with a jump shot and a free throw by Howarth extended Carnegie Mellon University's lead to 71 – 62.

Although both teams continued to score points, neither team seemed to be able to get any significant gain on the other, and the game headed into the final five minutes of action with the score reading 74 – 66,

prompting the Tartans to call a 30-second timeout.

This had no significant effect on the flow of the game, however, and the teams continued to trade off scoring, with the Tartans maintaining their slight margin. Two free throws by Howarth made the score 82 – 73, and with just 46 seconds left on the clock, Carnegie Mellon University called their second full timeout.

This time, the timeout seemed to momentarily hinder the Maroons, and the last 46 seconds saw little change to the score aside from two successful free throws from Watson. The

game ended 84 – 73.

This win meant that the Carnegie Mellon University men's basketball team swept the season series. Having scored 20 points during the game, Howarth moved into 10th place in terms of Carnegie Mellon University's all-time scoring list. With 18 points and 14 rebounds, Suddeth recorded a University Athletic Association-leading 10th double-double. With six assists, McNeil continued to extend his school assist record.

The Tartans now look forward to facing Emory College on Friday, Feb. 21.

## Proposal to the ISU

**ISU**, from A10

Additional changes proposed include that the technical program's technical elements would account for 60 percent of the overall score and the program component score (PCS) or artistic score would account for 40 percent of the total whereas the technical score would account for 40 percent of the total and the PCS would account for 60 percent of the free skate.

In email exchanges with NBC Sports, Fabio Bianchetti, the current chair of the ISU's singles and pairs technical committee, has stated that these proposed changes are ultimately intended "to push skaters to look for quality and not only for difficulty with much more time than today for transitions and choreographic moments."

If approved by the ISU, the changes would take effect in the 2022 – 2023 season.

While there have also been ideas to split the short program and the free skate into two distinct competitions with separate medals awarded for each, no formal proposal has yet been made.

Overall, figure skating has recently seemed to stray from its artistic qualities in favor of raw

athleticism. While proposing changes in order to preserve the sport's artistic qualities is reasonable, the framework outlined, though seemingly well-thought-out and unquestionably radical, may not be the most apt way to address this situation.

On the other hand, however, it is completely possible that the radical nature of this proposal is, in fact, the best way to address these issues.

Essentially, the drafted plan is not all that difficult to write out. Its implementation, while certainly feasible to a degree, will affect athletes, judges, and all those involved in the sport on a global scale. Possibly, the proposal will cause unnecessary convoluted, while changing little in terms of shifting the sport back towards its original artistic roots.

It would be a mistake, though to not consider the fact that it is certainly plausible that the radical nature of the proposal is exactly what the figure skating community needs right now, and that the proposal will spark a change that adjusts the course of the sport for the better.

Either way, it will be fascinating to see how the proposal process plays out, and how these changes, if passed, changes the sport of figure skating.



### Summer Employment at Carnegie Mellon: Teaching Assistant and Residential Counselor Jobs in the Pennsylvania Governor's School for the Sciences

Undergraduate summer employment at Carnegie Mellon University is available with the Pennsylvania Governor's School for the Sciences (PGSS). The PGSS is a five-week summer school for extremely talented high school students from Pennsylvania. Teaching Assistant/Counselor appointments are available in the areas of biology, chemistry, computer science, physics and mathematics. In addition, one or two positions may be available as Co-Directors of Residential Life. Academic duties of the TA/Counselor include assisting with lecture and lab courses and mentoring team research projects. Counselor duties of the TA/Counselor include living in the same dormitory as the PGSS students, ensuring that students adhere to the PGSS disciplinary rules, providing tutorial help in the academic program, and arranging and conducting social activities. Co-Directors of Residential Life (a.k.a. Head Counselors) are responsible for overseeing the TA/Counselors and fostering a safe, collaborative living and learning environment for the PGSS students.

TA/Counselor applicants should have finished their sophomore year by the start of the summer program. Consideration will also be given to extraordinarily qualified first-year applicants. Preference will be given to applicants with strong academic records and strong social skills. Prior experience with PGSS or a similar summer program is preferred, but not required. Applicants for Co-Director of Residential Life should have graduated from college or university by the start of the summer program. Further information is available at the PGSS web site: <http://sciences.pa-gov-schools.org/>.

**Stipend for five-and-one-half week period:**

**\$2,500 for new TA/Counselors, \$2,750 for returning TA/Counselors  
\$3,000 for Co-Director of Residential Life**

**Housing is included (in the PGSS dorm) as well as a food allowance.**

**Duties begin Wednesday, June 24, 2020, end Sunday, August 2, 2020**

Apply online at the CMU website; use the keyword PGSS:

<https://www.cmu.edu/jobs/index.html>

Contact the PGSS Program Office at (412) 268-6669

or e-mail [pgss@cmu.edu](mailto:pgss@cmu.edu)

**Application Deadline: March 31, 2020**

(Applications may be accepted after the deadline until all positions are filled.)



Photo courtesy of Luu via Wikimedia Commons

Athletes like Nathan Chen (center) have changed the sport with their jumps.

# Sports

## Basketball completes season series sweep

CYNTHIA XU  
Sports Editor

The Carnegie Mellon University men's basketball team played against the University of Chicago last Friday in a close match that ultimately gave the Tartans their 10th win of the season.

The Tartans started out quite strong in the first half, with two layups from senior Trent Suddeth and junior Ethan Miller, both assisted by senior Colin McNeil, putting Carnegie Mellon University a solid four points in front of their opponents. Although the Maroons sought to bring the scoreline closer with a successful three-point jump shot, the Tartans continued to maintain their lead.

A well-aimed three-point jump shot by junior Daniel Weiss extended the Tartans' lead to 13 – 7 with just under 14-and-a-half minutes left on the clock. Though both teams made efforts to improve their position, the score stayed locked for nearly two minutes. A free throw made by the Maroons was soon matched by a layup by Carnegie Mellon University junior Zach Watson, making the score 15 – 8.

Watson then made both free throws awarded to him off of a University of Chicago foul, and though a layup seemed to turn the game back towards the Maroons, a three-point jump shot by first-year Nick Nakasian quickly dispelled these apparitions by increasing the Tartans' lead to a formidable 20 – 10.

Jump shots made from behind the three-point line by junior Joey Krempa, along with another one by Miller, then brought the scoreline to 26 – 10, with just under 10 minutes left to play in



Photo courtesy of Carnegie Mellon Athletics

Zach Howarth (right) scored a game-leading 20 points as Carnegie Mellon University men's basketball team beat the University of Chicago at home.

the first half. With three-point jump shots made by seniors Zach Howarth and Cooper Williams, the Tartans gave themselves an 18-point lead, the score reading 38 – 20 with just under 5 minutes left in the first half.

Although points were traded among both teams, Carnegie Mellon University managed to hold onto their lead, for the most part, ending the first half 44 – 29.

The University of Chicago attempted to begin their second half aggressively, but efforts from Howarth, Miller, and McNeil maintained the margin,

with it reading 52 – 33 in the Tartans' favor, where it stayed for a minute and a half.

Despite further efforts by the Maroons, Carnegie Mellon University continued to lead with a sizeable 57 – 41 with a quarter of the time in the second half gone, forcing University of Chicago to call their first 30-second timeout.

This seemed to temporarily stop the Tartans' momentum, but the Maroons failed to capitalize on it, with the score essentially remaining the same for the next minute and a half, except for

a single free throw scored by Suddeth.

Both teams proceeded to trade off scoring, and with 10 minutes left on the clock, University of Chicago had managed to close the gap to 12 points, the scores reading 62 – 50 in favor of the Tartans. However, this momentum by the Maroons necessitated a full timeout called by Carnegie Mellon University.

The timeout seemed to have little effect on their opponents, however, and University of Chicago lessened the margin to 10 points. The score now reading

64 – 54, the Maroons kept the Tartans from scoring while racking up a few more points of their own to make the scoreline 64 – 59 with just eight minutes left on the clock.

Both teams then scored layups, but a three-point jump shot by University of Chicago reduced the Tartans' lead to just four points. At 66 – 62 in favor of Carnegie Mellon University, the Maroons called a full timeout to prepare for the last seven and a half minutes of gameplay.

See **BASKETBALL**, A9

## Changes proposed to ISU

CYNTHIA XU  
Sports Editor

It's no secret that these days, the difficulty of a figure skater's jumps is one of, if not the most, significant determinant of their final score. As such, dissatisfaction has grown in parts

jumps, so it was the mark that had the importance. That's not the case anymore."

This growing discontent has been a significant reason behind a new proposal that has been brought before the International Skating Union (ISU). While the entire proposal's contents and

would skate in a technical program and a free skate, each three-and-a-half minutes long. As in the current system, the scores would then be added to produce the final score.

This adjustment in length would effectively reduce the disparity of technical points

## Penalty shouts: The XFL kicks off again

NATHANIEL RICHMOND  
Staffwriter

*This is Penalty Shouts, The Tartan's sports column inspired by the The New Yorker's column Daily Shouts. This satire-fueled column will focus on anything and everything funny in the sports world that is deserving of our comedic attention.*

The XFL kicked off this week, and most football fans were unmoved. Traditional fans were confused by the new rules, like the requirement during kickoffs that everyone except the kicker and returner stand five yards apart until the ball is caught. The casual fans didn't care for subpar professional football right after the NFL season. And the questionable gains left would-be pundits like myself wondering why it exists in the first place.

Billionaires like WWE CEO and XFL owner Vince McMahon are entitled to spend their fortunes however they want, I guess. But still, why try another American football league when the NFL is doing fine? There is a long list of failed major leagues: The United States Football League (1983-1985), the original XFL (2001), the United Football League (2009-2012), and, just last year, the Alliance of American Football (AAF) failed after only a few weeks of play. Even after a successful first week, I wouldn't say the XFL is safe yet. The AAF

similarly had good ratings but then failed before the season ended.

This is why I propose that, if they're going to have the over/under of each game on the broadcasts, they should put the over/under on the number of weeks the XFL is expected to survive. At least the XFL is trying to shorten the games, so that I don't have to watch them.

Seriously, though, I would like the XFL to be a more unique departure from the NFL. Maybe it could be more like wrestling. Just throw in The Rock and make it into a movie. I'd watch that. Add John Cena, and it's like half of a Fast and Furious movie. It's a shame they didn't allow players to choose the name on their jerseys as in the original XFL. I still think "He Hate Me" should have a spot in the Football Hall of Fame.

There is something to be said for the XFL. Maybe removing kickoffs where players collide head-on at full speed, letting a team have their offense and defense each play in overtime, and reducing the time between plays are all good ideas. They seem like they could really bring in a new audience who are alienated by the stubborn rules of the NFL as well as its handling of the CTE scandal. And the ball has an "X" on it!

However, according to bookmakers, these ideas are only expected to help the XFL survive seven weeks of its season.

**"We always tried to make the creative side just as important as the jumps, so it was the mark that had the importance. That's not the case anymore."**

Brian Boitano  
Olympic Gold Medalist

of the figure skating community towards the current state of the sport and the way it's structured, as they feel the sport has evolved into what is essentially just a "jumping contest."

According to four-time U.S. champion, two-time world champion, and Olympic gold medalist Brian Boitano, "We always tried to make the creative side just as important as the

details aren't set to be made public until April, the general framework appears to be an attempt at better balancing the technical and artistic sides of figure skating.

Under the proposed system, rather than skating in a short program, usually around two minutes and 40 seconds in length, followed by a circa four-minute free skate, athletes

available in the short program (7) compared to the free skate (12). While the short program accounts for only around 25 – 35 percent of the skaters' total score today, the proposed system could potentially allow the technical program and free skate to have equal weight on the total score.

See **ISU**, A9

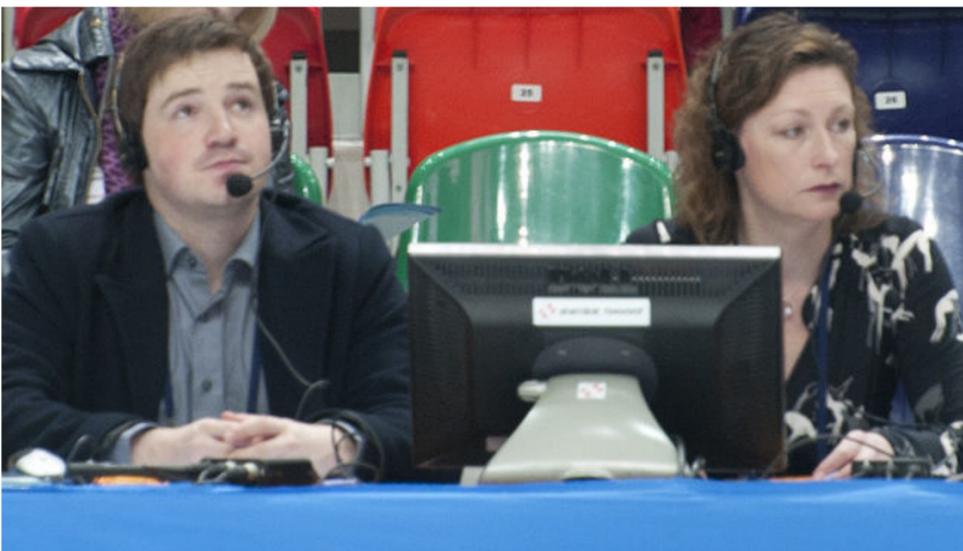


Photo courtesy of deerstop via Wikimedia Commons

In recent years, technical elements of figure skating routines have become more and more crucial in scoring.



Anna Boyle/Visual Editor

# pillbox

The Tartan's Art & Culture Magazine



February 17, 2020

B3 *After School* | B6 *Birds of Prey* | B12 *Fantasy Island*

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# Melanie Martinez:



## After School

written by Madeline Kim | Forum Editor  
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It has been less than a year since singer-songwriter Melanie Martinez came back to the music scene after a three-year hiatus. Her sophomore album, *K-12*, and its corresponding film of the same name, marked the end of her three-year hiatus. She announced on her Instagram story that she would be releasing seven songs in 2020. Many fans speculated about an EP release to accompany *K-12*, especially considering a song that is not on the album was featured in the film's credits and fans allegedly overheard Martinez rehearsing unreleased music behind the scenes.

On Feb. 9, Martinez confirmed the speculations on her Instagram stories: *K-12* would have a sequel released as an EP, *After School*, that would be coming out "sooner than you think." She then released "Copy Cat" featuring Tierra Whack, the next day. In the same Instagram story, she praised Whack as "one of [her] favorite artists."

"Copy Cat" is the first time Martinez has collaborated with another artist or incorporated hip-hop into her music. However, she keeps her same take on avant-garde pop and Whack's rapping meshes seamlessly into the track. This single was certainly an unexpected release in its style, but it is a

welcomed sneak-peek into *After School*.

"Copy Cat" is a vicious jab at another singer-songwriter, Timothy Heller. Martinez and Heller had been friends when they began their journeys as musicians. However, Heller accused Martinez of sexual assault in a now-deleted tweet. Martinez responded to the claim that Heller repeatedly said "no" with "she never said 'no'." It did not take long for Martinez's quote to be perceived as victim-blaming Heller.

Some inconsistencies of Heller's accusation were quickly noticed. The date of the alleged incident – June 25, 2015 – just so happens to overlap with Martinez's *Cry Baby* tour. This contradicts Heller's claim that the alleged sexual assault occurred in Martinez's house. Heller responded to this criticism by claiming "it's frustrating to feel like I need to prove myself to people who clearly have no sympathy for victims." Additionally, screenshots from deleted posts show that Heller not only stayed in contact with Martinez but also dressed up as Martinez and tagged her in a now-deleted Instagram post.

*After School* is expected to be released in spring 2020.

# Celebrating International Movies This Edition: Korea

Since *Parasite* won best picture, I couldn't write my usual rant about how bad the Oscars are again. But it did show that international, non-English language films, are gaining recognition in the U.S., and there is a whole world of film across the globe offering stories that people here can connect with. The one-inch barrier of subtitles is starting to be broken down, so I thought it would be fun to go through and talk about international films. This will be part of a longer running series where I talk about different films from different parts of the world. So for this first one, we'll start with Korean cinema.

In my opinion, the contemporary Korean film industry is making some of the best films currently, especially when it comes to their thrillers. *Parasite* is a great example of this and has become one of my favorite films. The director Bong Joon-ho's other Korean language films are also excellent. *Mother*, *Memories of Murder*, *The Host*, and *Barking Dogs Don't Bite* are all great films of different genres with memorable characters, amazing production, and biting social commentary. He also has two English language films, *Snowpiercer* and *Okja*, that are also great, but I personally prefer his Korean language films.

Another fun thing about Bong Joon-ho's movies is that he has a consistent theme he likes to explore across his different films and comes to different conclusions with them, which is often related to class consciousness. For example, *Mother* and *Parasite* explore how class solidarity can break down. On the other hand, *The Host* and *Snowpiercer* explore how the lower class unites. All of them explore the futility of class mobility, and, for the sake of not spoiling, you can view the conclusions of all of them and get a really unique and holistic picture about class from a director who has created this thematic universe. It's neat to see a director do this.

What's also interesting about Korean thrillers, and East Asian cinema as a whole, is how they go all out in the production of all of their movies. The financiers trust the directors, and the directors trust the audience to stick with them through the ride. There are American films that do this as well, but for some reason with Korean cinema, it's at another level.

My favorite Korean director who embodies this philosophy is Park Chan-wook, who has made masterpieces like *Oldboy*, *The Handmaiden*, *Thirst*, *Sympathy for Mister Vengeance*, and *Lady Vengeance*. The

first two in that list are two of my personal favorite films ever.

*Oldboy*, which came out in 2003, is one of the most twisted, hypnotic revenge sagas I have ever seen. It is a visceral deconstruction of revenge and the injustice of taking justice into your own hands. I have seen it four times, and I feel physically gross after finishing it each time. Park Chan-wook is also a master at getting the audience to glean a lot about a character while not showing a lot. It also has one of the best fight scenes ever, with the three minute one take in the hallway. It's not very common to have a film like this have a fight scene with 25 guys flailing around, but this film does it incredibly well.

*The Handmaiden* came out in 2016, and it was my favorite film from that year. It's a historical erotic thriller of a man using a caretaker to con a Japanese heiress. If that premise doesn't entice you, watch the film anyway because it gets more insane as it goes along. I won't say anything more about it.

What's amazing about Korean thrillers is that as crazy as they can get, it still feels grounded and believable because there is such a great understanding of the characters



within the story. Their motivations make sense, and the insanity of the story is helped along by the decisions each character makes.

From my understanding, these are also considered mainstream films in Korea. It's a bit similar to the American cinema in the 1970s, where films like *The Godfather* were also mainstream, commercial films. It's amazing how there are producers who understand that it's possible to create original and unique stories that are profitable. I wish they were more common in the U.S today.

The last director I'll mention is Lee Chang-dong. He directed *Burning*, which was one of my favorite films of 2018. It also has Steven Yuen from *The Walking Dead*, and it's easily the best performance I have seen from him. Whereas the films of Bong Joon-ho and Park Chan-wook are faster paced, this one is a slow burn, patient mystery. But it's one of the slow burn films that even those who aren't into slow burn movies would be into because of how entrancing it is.

Lee Chang-dong's films in general are a lot more slow burn and meditative, so if you're into that, *Secret Sunshine* is another great one I'd recommend, too. The film

follows a widow dealing with grief, and while it's a really sad film, it's incredibly breathtaking and really powerfully acted. I haven't mentioned the actors yet, but if the Academy actually recognized Korean actors, then Song Kang-ho and Jeon Do-yeon would have been nominated for this film and many others.

I haven't seen any Korean films from before 2000 that I can remember off the top of my head, so that's something I would like to personally find out more about. But as of now, Korean cinema is doing really well, and I'm glad that *Parasite* winning best picture is getting Korean films more attention. There are many Korean directors I am following, and I am really excited to see what other films we will get from them.

Other notable recommendations:

*The Man From Nowhere* (Lee Jeong-beom)

*Train to Busan* (Yeon Sang-ho)

*A Taxi Driver* (Jang Hoon)

*A Tale of Two Sisters* (Kim Jee-woon)

*I Saw the Devil* (Kim Jee-woon)

*The Wailing* (Na Hong-jin)

*Moss* (Kang Woo-suk)

*The Chaser* (Na Hong-jin)

*Spring, Summer, Fall, Winter ... and Spring* (Kim Ki-duk)

# ♥ BIRDS OF PREY ♥

## (AND THE FANTABULOUS EMANCIPATION OF ONE HARLEY QUINN)

written by Izzy Sio | Contributing Editor  
layout by Alexandra Yu | Pillbox Editor

From a marketing push that focused on female power, a reclamation of a narrative, and basically anything that wasn't related to Jared Leto's infamous Joker from 2016's *Suicide Squad*, it was clear that director Cathy Yan's DC installment *Birds of Prey (and the Fantabulous Emancipation of One Harley Quinn)* had a certain audience in mind. And I'll be completely honest, I was definitely in that audience.

The film, while mainly focused on Harley, speaks to the power of female unity and empowerment. It's a film that feels like it's made for edgy girls that shop at Hot Topic or Dolls Kill. Like most superhero movies, it's filled with further references to DC comic book lore that Harley Quinn fans will be able to recognize. For those who liked the aesthetic of *Suicide Squad* (or at least its first 10 minutes), *Birds of Prey* embraces that in its off-the-wall style.

Maybe I should start from the beginning. *Birds of Prey* follows Margot Robbie's Harley Quinn, recently breaking up with the Joker and attempting to embrace her new life unchained to her abusive ex-boyfriend. Harley—with the help of other superheroes—protects a young girl named Cassandra Cain from the larger Gotham City crime scene while trying to make it on her own as a mercenary in Gotham.

Almost following in the footsteps of Todd Phillips' *Joker* in trying to capture a certain vibe and market (high-class naysayers of superhero films?), *Birds of Prey* feels like a refreshing step in the same independent direction that Warner Bros. is aiming to take their DC films into. In some ways, *Birds of*

*Prey* feels like DC's alternative option for a female empowerment film for critics of 2017's *Wonder Woman*, or maybe for those who liked the Patty Jenkins-directed film but didn't absolutely love it.

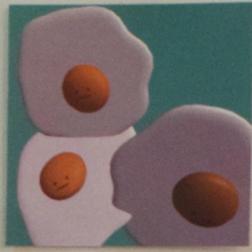
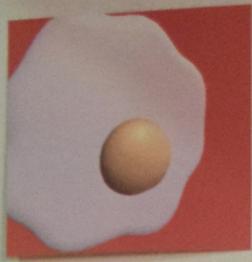
In other words, it shows DC's aim to widen their market to provide different kinds of stories for different people. One of Harley's defining and more controversial characteristics is her toxic and abusive relationship with the Joker. By breaking that relationship, director Cathy Yan launches a refreshing female take in the superhero sphere. Yan showcases all of Harley's strengths and weaknesses: her intelligence, her tendency to be an airhead, her kindness, and her proficiency in leadership. Most profoundly, Cathy Yan attempts to candidly show the up-and-down cycle of Harley's life and her recovery from (in the words of Harley Quinn) being a really shitty person into a less shitty person.

While the fundamental messages of *Birds of Prey* clearly exist in the film, the writing somehow makes them simultaneously too ham-fisted and too hidden. In trying to highlight each of Harley's fellow female crime fighters, the movie's pacing suffers. While it is easily attributed to Harley's chaotic personality, having that translate into a storytelling format wasn't the greatest decision. Throughout the first 30-40 minutes of the film, the timing jumped around so much that it felt hard to tell where things started and things ended.

Like the timing and pacing of the movie, the time and attention spent on characters also felt a bit haphazardly distributed. Some

characters and their storylines fell flat, such as police detective Renee Montoya's storyline. Highlighting sexism in the workplace and the protection of the upper class, familiar archetypal storylines seen throughout this year's Oscar campaigns made the underlying tone of female empowerment feel hammered in and suffocating. Some characters and storylines stood out. The motivations of the allegiances of Jurnee Smollett-Bell's Black Canary were a compelling foil that injected a bit of life into Renee Montoya's overdone storyline. Ewan McGregor truly looked like he was having fun portraying villain Black Mask. And Mary Elizabeth Winstead's Huntress was a surprising and entertaining comedic foil, serving to highlight female vengeance. They all added color (both metaphorically and literally) to the world-building and society of the movie, and it's a shame that there couldn't be more time spent on these storylines.

In trying to be as unbiased as I could, I can say that at the very least *Birds of Prey* is still a ton of fun. While a bit all over the place, *Birds of Prey* embraces as much of Harley's odd-ball energy as possible while still telling the a story of female unity and empowerment that feels refreshing within the male-dominated superhero landscape. In a movie landscape that is always trying to please higher-ups to earn acclaim, *Birds of Prey* candidly embraces irreverence and chaos, no matter who's along for the ride.



XX\_CUTEPIXEL\_XX: THE INTERVIEW





Last weekend, the art exhibit *xX\_CutePixel\_Xx* by Yixin He, Alyssa Lee, Eileen Lee, Connie Ye, Lexin Yuan, and Lauren Zhang came to the Frame Gallery. Coming from art, computer science, and HCI backgrounds, the artists' aim was to "explore what it means for digital representations to be 'cute' or nostalgic, deconstructing the word as it relates to 2010s digital culture" and "investigate how nostalgia plays into placing humanity back into data-driven, web or creative technological works."

I was fortunate enough to have the opportunity to ask the artists some questions about their experiences with the internet and creating the exhibit after the reception.

### What was your inspiration for this exhibit?

**LZ:** For the exhibition theme, we were thinking about what we all had in common, and as artists who all deal with or use technology heavily in our art, it made sense to think about our roots, reexamining our childhood experiences with technology and how they influenced our work today.

**AL:** I wanted to create this exhibit as homage to all of the websites, games, TV shows, etc. that inspired me to become an artist and computer scientist.

**CY:** I wanted to make a Frame show that was explicitly "cute"!

### What was the inspiration for your specific pieces?

**LZ on *Untitled Blob Man*:** *Untitled Blob Man* kind of unintentionally fit the theme — I made him at a craft/painting hangout my friends had, and when I moved into my apartment, I didn't have something to hang him on the wall so I just left him on a stand on the floor, and there he remained. I thought he looked like a little internet profile icon, and it was cool that he was sitting in 3D space, not on a wall or computer screen.

**LZ on *Mii Simulator*:** I was back home and I found my old Wii controllers and simultaneously thought about my memories of the Mii Channel and how fun it would be to play computer games with the Wii remotes. Up until this point I'd been struggling to think of something that resonated with me that would be relevant to "cute pixel" and digital nostalgia, but I spent a lot of time on my Miis as a kid, so I thought it would be cool to elevate these nuggets of memory to something of a spectacle.

**LZ on *Clark's Empire*:** a website that links to a number of businesses that have the name Clark in their titles. It was very much a "shower thought" moment that came when I was trying to remember the link to a website that had the name Clark in it and found some very interesting, clearly outdated websites.

**YH:** My main piece was *Dress Down Game*. I played a ton of dress up games in my childhood, so I wanted to make something fun and surprising based on those games.

**AL on *Trainer Cards*:** I made a station where people could assemble their own ID cards because I wanted everyone to be able to take a piece of the show home with them and

interact with the work. Part of my inspiration for this was something like a dress up game, where you can piece together an image that reflects your personality. It was fun to make something physical for a change since most of my work is computer based.

**AL on *@good\_egg\_bot*:** *@good\_egg\_bot* was inspired by the many Twitter bots that already exist, plus my love for eggs and giving away art. I like the idea of a friendly bot that will do something simple like give away eggs.

**AL on *Ink Game*:** *Ink Game* was made to simulate drawing in first person view of the paint. It is similar to making a big drawing in the snow or sand, but with the added utility of MS Paint-like features (changing colors, line width, and flood filling). The CMYK color scheme is inspired by a printer.

**CY:** I made the *Digital Pet Graveyard*, *Utopia* (face morphing webpage) and the *Pixel Art ML studies*.

**EL:** I created the customized cat characters (screenprint on paper). The vaguely-shaped cats all vary from each other in small ways (different eye colors and eyes, clothes, etc). They are lined up in multiple rows, and you can choose one to take home!

Although my work is not usually themed around old internet nostalgia, I grew up with games like Neopets and Club Penguin as a kid, and I miss when the internet had chaotic, ugly websites. (It feels much more intimate and personal visiting a website designed by someone who just wanted to show the world some funny cat pictures.)

I used to spend a long time creating my own characters, changing the body color and adding on ribbons and hats, and this customization was my favorite part of playing a game. I wanted to imitate that experience but alter it a bit so that the characters are more tangible and participants can physically take one home with them (kind of like Build-a-Bear).

### How has growing up with the internet impacted you and your work?

**LZ:** I think the internet has given me a lot of appreciation for self-referential, irreverent, and “stupid” meme humor, like puns. I think there’s a reason memes and other related things on the internet resonate with our generation so much, and I feel like I always end up trying to capture parts of that energy.

**YH:** The topic of this show weirdly isn’t something that’s too present in my work normally. I haven’t thought about a lot of the games and websites we talked about for years, but I think after this show I’d like to make more.

**AL:** Neopets was the place where I learned how to create web pages and share my art with others. I think that the internet has impacted my work because there are so many sources of inspiration and learning. I have benefited a lot from free online tutorials.

**CY:** I’m really inspired by how you can make your work really easily interactive and accessible with the internet! I also think that sometimes we build items that we yearn for, and so I like reminiscing about what was on the internet when I was younger. For example, the longing for connections with others with social networks, the longing for pets with Neopets/Webkinz, longing to experiment with identity and realities through avatars and games, etc.

### What was the creative process like working across different disciplines?

**LZ:** It usually doesn’t feel like I’m working “across disciplines” when I create my work, because it feels like technology is not another discipline but just another medium/tool. Most of us didn’t collaborate on pieces together, but I think the experience of planning the show together was very fun. Everyone brought their own childhood experiences into the space, not just in their work but also in the food and decorations.

**AL:** The six of us came together because we have similar interests, and we were pretty familiar with each other’s work so it was a good experience to work together. A lot of us are usually working across disciplines so it just feels normal at this point.

**EL:** It was great to see a variety of work come together to represent our theme of digital nostalgia. Although our work was not too collaborative, I loved seeing how everyone brought the most memorable piece of their experience with the internet to life. It was a pleasant surprise to remember a game that I completely forgot about, or to see icons and imagery that felt nostalgic, but I couldn’t quite place a finger on.

### How do you think the internet culture has changed over the years?

**LZ:** I feel like if the internet has shifted, it’s because I’ve grown older and moved to other parts of the internet, although I’m glad that the cute but “cringey” aspects have been reclaimed by many people our age.

**YH:** The old aesthetic of saccharinely cute things is gone, and the old games made with the minimal amount of tech and programming are gone. Cute things definitely still exist and

are super popular – just look at the hype around the upcoming Animal Crossing game and Animal Crossing Switch. It’s just different.

**AL:** I think that there are still cute things on the internet but I don’t really use it for that purpose, and even if I did I don’t think it would feel the same. Age is probably a huge factor, since when I was younger I had a lot of curiosity and excitement about the internet. Now that I’m older the technology is a lot less impressive and interesting. For example, I can see that a lot of my favorite games were essentially random number generators, and that makes them lose their magic.

**EL:** As the internet grew, it shifted a lot in both content and aesthetic. As interface design and website design grows and becomes more of a polished study, the websites and applications we use and visit are built by a team of professionals, hired by companies who aim to sell and keep up a professional image. There are some areas of the internet that are still cute, but it’s hard to find many websites that were as horrid and clunky as websites like “I Can Has Cheezburger?”.

### What former internet trends are you most nostalgic about?

**LZ:** I will always love Homestuck. That is all.

**YH:** I’m really going to miss a lot of the flash games I played when I was younger since Adobe Flash is being phased out. I hope someone preserves The Impossible Quiz in a non-Flash form.

**AL:** I really miss Neopets, I spent so much time on that site as a kid and I really feel like it inspired me the most.

**CY:** I miss Webkinz!

**EL:** I miss Neopets, “I Can Has Cheezburger?”, The Oatmeal, sending chain emails, flash games (like This Is The Only Level).

# Little Shop of Horrors

written by Alexis Trbovich | Junior Staffwriter  
layout by Alexandra Yu | Pillbox Editor

Fame, fortune, human-eating plants; these are just a few themes in the classic 80s musical *Little Shop of Horrors*, and its film adaptation. You weren't around to see it in theaters in 1986? Me neither. Thankfully, you have one more week to catch it at the O'Reilly Theater in Downtown Pittsburgh.

When I first sat down in the theater, I was confused. A man dressed in tattered clothes walked along the edge of the stage, talking to a few patrons and roaming around. I nudged my boyfriend next to me to see if he had noticed. Seeing that security hadn't been called, I realized this man could be an actor in the play. My suspicion was confirmed when Trash Man crawled under a blanket of trash and remained there through the beginning of the show.

Three actresses formally introduced the show with a catchy prologue. The entire company was introduced during the next musical number, "Skid Row." Trash Man (a very nice actor named Patrick Cannon) emerged from his trash blanket to sing with the whole ensemble.

The story follows the woes of employees at a flower shop on Skid Row. The shop has three employees: Seymour, a nerdy florist; Audrey, a woman stuck in an abusive relationship; and Mr. Mushnik, the cranky old owner. While obviously different, these three have one thing in common: they dream of a better life for themselves, somewhere free of poverty and far from Skid Row.

Here's a quick plot summary: Seymour

discovers that his plant can talk, and on top of that, will only feed on human flesh and blood. Seymour falls in love with Audrey, whose evil boyfriend accidentally dies from nitrous oxide poisoning and gets fed to the plant by Seymour. Seymour then has to grapple with the guilt of feeding people to his talking plant (who he's named Audrey II) that is making him rich and famous. I know that may seem weird. However, this musical has some meaningful messages behind it, and the Pittsburgh Public Theater's production did a wonderful job delivering those.

One of the strongest deliveries came from Philippe Arroyo, a Carnegie Mellon alum who played the lead role of Seymour. You could see through his facial expressions and body language that he put every ounce of his artistic self into the role, and his vocals were absolutely top-notch. I thoroughly enjoyed his performance.

Patrick Cannon proved to be a versatile actor throughout the show. In Act 1, he played Orin, Audrey's abusive boyfriend who became a dentist to inflict pain on other people. He effortlessly switched over to a variety of characters who came to Seymour with business inquiries in Act 2. The greatest actor you barely saw was Monteze Freeland, the booming voice of Audrey II. He was a great choice to bring the plant to life. The plant itself was also impressive. It was a huge puppet, moved around by a puppeteer, with incredibly colorful and realistic details. It's those types of details that really made this show shine: the spots and colors on the

plant, the coordinated projection design, the actors always remembering to come in through set door to the flower shop, even if they had to walk around the entire stage to do so.

The most impressive part of the show, in my opinion, was that the actors and orchestra could not see each other, yet they were always perfectly in sync. The orchestra was underneath the stage. Completely underneath. If the conductor hadn't poked her head out at the beginning of the show to acknowledge the audience, I would have never seen her. The actors never showed any anxiety or hesitation without a conductor to watch, and the orchestra never missed a beat. Witnessing the total trust between the cast and orchestra and its flawless execution was inspiring.

Okay, so you may be reading this and thinking: "So what if the acting was great? This show sounds weird." It's definitely unique, but it touches on questions people face all the time: How far would you go to get what you want? If you were living in a life of poverty or homelessness, what would you do to get out of it? If you suddenly came into financial fortune, what would you do to keep it? Would you sacrifice relationships with people you love? Would you knock over people who could threaten you?

This show may have a giant talking plant in it, but it's incredibly human in so many ways. I encourage you to explore these questions for yourself and see it while it's still on stage here in our backyard at the O'Reilly Theatre.

# mood swings

# the tartan playlist

## song

"Bite Your Teeth"  
"PPP"  
"money machine"  
"Stoney"  
"No Happy Place"  
"Accelerating Universe"  
"Texas Reznikoff"  
"Cult of the Dead"  
"Off Deez (with J. Cole)"  
"M.A.H"  
"STONEFIST"  
"L'idiot Leon"  
"Gravity Eyelids"  
"You and I"  
"Daydreaming"  
"I Shot the Devil"  
"Honeybee"  
"Astronomy Domine"  
"Cranes in the Sky"  
"Lorem Ipsum"  
"The Perpetual Glow of a  
Setting Sun"

## album

*I Disagree*  
*Depresson Cherry*  
*1000 geecs*  
*Bucket List Project*  
*Rat Songs*  
*Black Future*  
*Bury Me At Makeout Creek*  
*Cult of the Dead*  
*Dicaprio 2*  
*In a Poem Unlimited*  
*DEATH MAGIC*  
*Viva Boma*  
*In Absentia*  
*You and I*  
*A Moon Shaped Pool*  
*Suicidal Tendencies*  
*The 2¢ Show*  
*Nothing Face*  
*A Seat at the Table*  
*[USA]*  
*Illusory Blues*

## artist

Poppy  
Beach House  
100 geecs  
Saba  
Dream Rats  
Vektor  
Mitski  
Legion of the Damned  
JID  
U.S. Girls  
HEALTH  
Cos  
Porcupine Tree  
Caribou  
Radiohead  
Suicidal Tendencies  
Steam Powered Giraffe  
Voivod  
Solange  
Anamanaguchi  
Messenger

It's Valentine's Day, and I don't really have anything going on. I just went through my daily routine of trying to find my ID and sorting out my issues. But that didn't matter, because the evening is, as Anakin Skywalker famously said, "where the fun begins". I had made plans with friends to watch a horror movie that I had seen no promotion or reviews for, had barely heard about, and had released in the middle of February. The film in question?

### *Fantasy Island.*

Just the name alone is enticing. Unfortunately for us, the film is only playing at AMC and in the Dolby Cinema format, with the rolling sound and sharp contrast screen. As we bought the tickets at the front desk, I got to glean more information about the movie. Turns out, it's directed by the man who made *Truth or Dare*, which is a really terrible horror film from a few years ago, and it stars the same lead actress. It's a remake of an old ABC show from 1977. The producer is Jason Blum of Blumhouse Productions, who has brought us gems like *Ma*, *Unfriended*, and *Ouija*. And it's PG-13, which is highly correlated with bad horror. Now my hype is through the roof.

I should say, for the record, that we were all sober, and the things I say happen in

this movie are real. However, it's hard to remember what happens. It's one of those movies that's simultaneously memorable and forgettable, like a traumatic experience. There's five movies in one, and it makes a movie that was only an hour and 49 minutes feel like four hours.

The premise of *Fantasy Island* is very simple. Five contestants are picked to spend some time on this island where there are two rules: 1) every guest has only one fantasy, and 2) each fantasy must be seen through to its natural conclusion. I don't even know where to start with this movie, so I'm just gonna go in order of what I remember.

Every one of the five central contestants is just so painfully cringe. You have Melanie (Lucy Hale), who is someone who wants revenge on a bully. There's Patrick (Austin Stowell), a generic looking white boy who wants a reenactment of *Call of Duty* because he feels bad that his dad is a war hero. Not to mention, he's a coward cop who once let someone die on the job. You have JD (Ryan Hansen) and Brax (Jimmy O. Yang), who are two stepbrothers who "want to have it all." Then there is Gwen (Maggie Q), who wants to accept a marriage proposal from a man she loves because she is filled with regret. This is the only fantasy that Mr. Roarke (Michael Pena) actually likes and considers a challenge.

I thought this was a horror movie, but this is already the best comedy of 2020. There is actual comedy in the movie,

with lines such as "why don't you bung-a-LOW with me?" making my eyes roll so hard they got lost inside my head. But fear not, for comedy is not the only genre this movie tackles. It's also a romance movie, an action movie, a war movie at one point, and a thriller.

So the opening scene has this woman named Sloane (Portia Doubleday) being kidnapped. Very predictably, it turns out she is part of Melanie's fantasy for getting revenge. Sloane used to torment Melanie all the time, and Melanie had a therapist she called "Dr. Torture," whose mouth she wanted to staple shut because of how much he talked. She wrote letters to her classmates as part of her therapy, which Sloane steals and plasters all over the school. Melanie is then rebranded as "psycho stalker girl."

So anyway, Melanie thinks Sloane is a hologram as she is torturing her, but then realizes that she isn't when she posts a video of Sloane having an affair on Facebook and watches Sloane's real husband's reaction. Then a man comes out to torture Sloane, and lo and behold, it's Dr. Torture with his mouth stapled shut. Dr. Torture is about to cut Sloane up, but Melanie saves her by electrocuting Dr. Torture to death. My laughter overpowered the theater at that point. This is the level of writing we are talking about, and it only gets worse.

The film is honestly a blur, and there is so much other stupid nonsense that takes place that I can't even begin to describe. Patrick gets to play *Call of Duty* with his dead dad. Gwen spends time

# FANTASY ISLAND

written by Sujay Utkarsh | Publisher  
layout by Robyn Lee | Visual Editor

with her new husband and daughter she always wanted. JD and Brax have it all, but then get held hostage by a Russian mobster. Melanie and Sloane escape, but Dr. Torture, who was supposedly killed, is alive again and trying to kill them. I look over at my friend, and our jaws have dropped as we try to make sense of it all.

It doesn't help with how horribly edited this movie is. There is no sense of direction with any of the edits. It just cuts back and forth between five different storylines, and it's so jarring because each one is tonally different. None of it flows at all. I also couldn't tell how much time had passed at any point, but not because that was the intent. I'm sure at one point it was night, but then it suddenly cuts to daytime in the next scene but the stories are supposed to be occurring concurrently?

The space of the island itself felt so large and small at the same time. Like apparently people get lost there, but also they are able to find each other relatively quickly somehow? There are also no real scenes. It will go from a half-baked story point to some random filler that doesn't develop any of the characters. There is one line where Brax jokes that Roarke had spiked their drinks, and I felt like the movie did that to me too.

I have seen a lot of movies in my time, and I have seen a lot of plot twists. The twists in these movies are up there with some of the worst ever. The first one is that the movie is, indeed, a fantasy. Michael Rooker plays some private investigator named Damon who says the island has this mystical water and rock that is able to make people's desires become real, like bringing people back

to life. Roarke is a slave to it because he wants to be with his wife, but the only way to do that is to stay on the island and fulfill other people's fantasies.

It gets more stupid. Later on, Roarke reveals to Gwen that his wife doesn't know who he is because she keeps dying and coming back to life for a reason I still don't get. It's pretty obvious the wife is his assistant, Julia (Parisa Fitz-Henley), but the movie tries to subvert that for some reason even though there is a scene that shows her coughing up blood. Gwen changes her fantasy with some weird hand-wavy loophole, and instead decides that the moment she regrets most is not saving her neighbor, Nick (Evan Evagora), in a fire she started, which is just so out of left field. She also sees that JD, Brax, and Patrick are all in her fantasy.

It turns out that everyone's fantasies are connected on multiple levels. Patrick's fantasy leads him to the mansion where JD and Brax have their fantasy. There is a really dumb standoff where Brax is holding the pin of a grenade and threatening to blow up the mobsters. Things happen that don't make sense. JD dies, the mobsters they kill return as zombies now, Patrick watches his dad die, and my hyena-like laughter has earned the ire of the innocent people sitting to my left trying to enjoy the movie.

So yeah, it turns out that everyone is actually a part of Nick's fantasy because everyone there has had some hand in Nick's death. But then it isn't Nick's fantasy, but Nick's mother's fantasy, and everyone thinks Julia is the mother. They try to get off the island, but the plane they are gonna leave on gets blown up by the zombies from earlier who have an

RPG. They instead decide to destroy the rock that grants people their desires.

There are some fight scenes that are like a bad version of *It*. Then in the dumbest of reveals, it turns out the whole thing is actually Melanie's fantasy all along. But that would mean she had two fantasies instead of one? I don't know. Anyway, she had been putting on an act to save everyone apparently just so they could know her worth before she killed them all. She feels horrible that she was made to believe that she couldn't get love because the night Nick died was supposed to be their second date or something, and she thought he stood her up. I love that this movie continues the trope of "bullied kid goes crazy and wants to murder everyone at the end."

The movie spells everything out for you with detailed exposition, and it still makes no sense. But yeah, I lose track of things again. Somewhere in there, there is another grenade standoff with Melanie. Roarke decides to let Julia go and gives Sloane a fantasy, and she has Melanie drowned by Nick's zombie who shows up in every predictable jumpscare this movie has. Before Melanie dies, she drops the grenade in front of everyone, Patrick jumps on top of it and sacrifices himself just like his dad did.

This is still only scraping the surface of the stupidity of this movie. I didn't even tell you about the part where Michael Rooker literally yeets himself off a cliff to try and kill Dr. Torture for the third time. Just go watch this movie. There's really nothing else like it, and I hope we never see anything like it again. 11/10 experience for a 1/10 movie. Congratulations Blumhouse Productions for having this masterpiece under your belt.

written by Cynthia Xu | Sports Editor  
photo courtesy of Wonderlane via  
Flickr Wikimedia Commons  
layout by Robyn Lee | Visual Editor

### “Four Years”

Four years of waking up to 5 a.m. alarms  
Of wincing at sore legs and aching arms  
Ignoring how the winter chills  
Just jump in, swim, and do the drills  
Till all I hear is water rushing 'pon my  
pounding heart  
And then it's over  
The memory a blur  
Another sunrise greeting me as I depart

Four years of chlorine mixed with sweat  
And hair that's always wet  
Or damp still  
When I awake  
With nothing fueling me but my will  
To make  
Each day a chance for better progress  
And forging friendships in the process

Four years of bracing for the start to sound  
Of waiting for my chance to fly  
Perhaps not very high  
Perhaps not very far  
But still as if a shooting star  
I'm soaring, floating, falling to the ground  
Except I travel through  
And find that there is naught but water all  
around

Four years of laughing with my team  
Some moments filled with ecstasy  
As if a dream  
Though other times did seem  
Less joyous in sincerity  
Yet I've no doubt in me  
That these four years were worth the pain  
For flowers blossom after rain

written by Cynthia Xu | Sports Editor  
photo courtesy of Rob Mitchell via  
Flickr Wikimedia Commons  
layout by Robyn Lee | Visual Editor

### **“Photograph”**

Sprinting towards the top of a hill  
Camera gripped tightly in one hand  
The other hand clutching my keys  
(Clinking and jangling as I run)  
Legs pumping beneath me  
One stride following another  
Across the grass

Air rushing into my lungs with each inhale  
Promptly forced out by the ensuing exhale  
A tinge of adrenaline in my veins  
And perspiration beginning to form on my brow  
Hearing nothing but blood rushing in my ears  
Feeling nothing but the urgency to reach  
The top of the hill

At last I mount the summit  
Legs slightly shivering from  
The journey or the breeze  
Breath coming out in short gasps  
And raise my eyes with hopeful triumph  
Only to find that the sun  
Had already set.

# horoscopes

Advice for the Signs

16

What troubles you?  
You shouldn't have to  
bottle it up.

*Aries*

march 21 - april 19

Don't get hopes too  
high. Don't be like  
Icarus.

*Taurus*

april 20 - may 20

Opportunities are  
everywhere! Be as  
picky as you want!

*Gemini*

may 21 - june 20

Here's an idea:  
spring cleaning as a  
new hobby.

*Cancer*

june 21 - july 22

You cannot be  
Superman  
everyday.

*Leo*

july 23 - aug. 22

Your self-restraint is  
a virtue. Use it well.

*Virgo*

aug. 23, sept. 22

Relationship repair  
time! PR skills to the  
rescue!

*Libra*

april 20 - may 20

Stop acting "knight  
in shining armor,"  
please.

*Scorpio*

oct. 23 - nov. 21

You can be  
vulnerable, you  
know?

*Sagittarius*

nov. 22 - dec. 21

You should re-read  
the tale of the boy  
who cried wolf.

*Capricorn*

dec. 22 - jan. 19

Don't bother with  
typing loose ends up.

*Aquarius*

jan. 20 - feb. 18

You're capable of  
being a leader. Be  
one.

*Pisces*

feb. 19 - march 20

# comics

## OK/okay/ok by xkcd

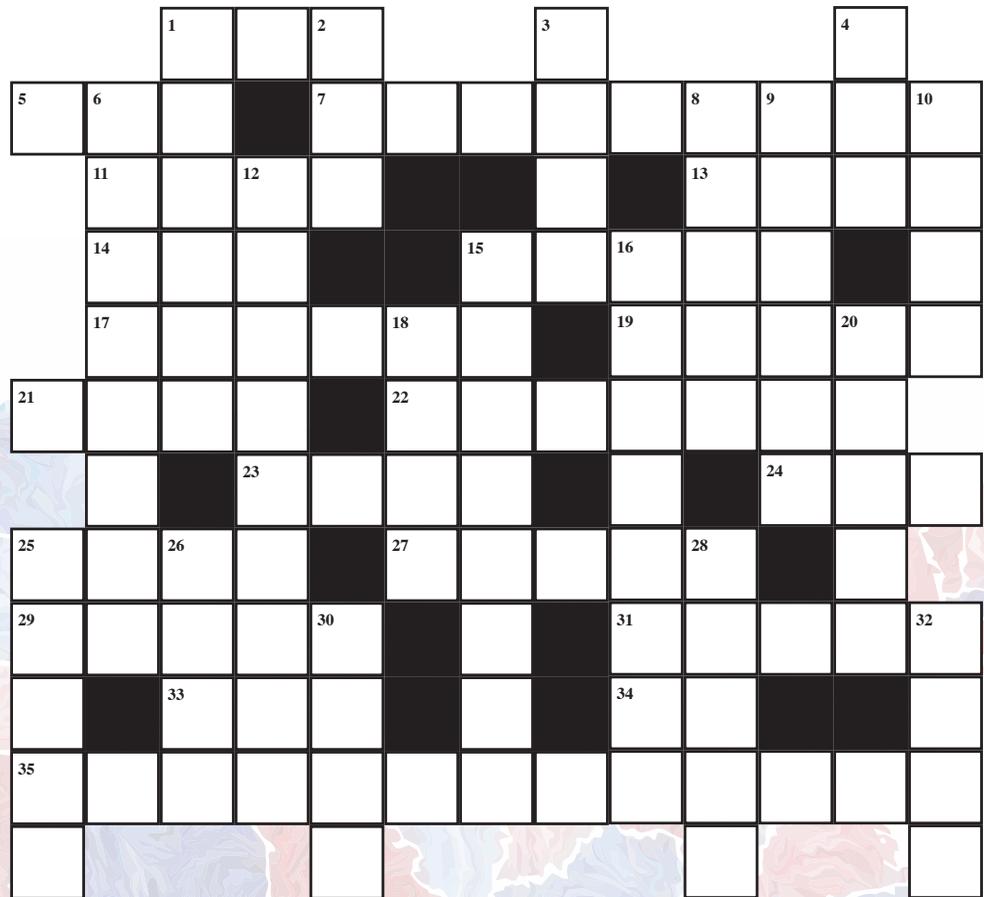
okay	ok	OK	O.K.
NORMAL	NORMAL	KIND OF OLD	LIKE AN ALIEN IMPERSONATING A HUMAN

HOW YOUR SPELLING OF "OKAY" MAKES YOU SOUND

Website: <https://xkcd.com/2250/>

# Swingy States of America

made by Kian Nassre | Staffwriter



Across.

- 01. Fruit punch maker
- 05. Punk rock offshoot
- 07. Massacre
- 11. Hawkeye state
- 13. Japanese golfer Isao \_\_\_\_\_
- 14. After sigma
- 15. Kind of engineer
- 17. Monopoly maker
- 19. Paraphernalia
- 21. Frisbee
- 22. Sunshine state
- 23. State of 9 down
- 24. Black gold
- 25. Prerequisite for gain
- 27. R2-D2, etc.
- 29. Distress, anxiety
- 31. African Republic
- 33. Spanish listen
- 34. Moon of Jupiter
- 35. Changed direction quickly

Down.

- 01. Kurfuffles
- 02. Enemy of the Union
- 03. German auto company
- 04. Romanian currency
- 06. Wolverine state
- 08. Haiti
- 09. Great Lake port city
- 10. Barbecue dish
- 12. Badger state
- 18. Used to track dogs, passports, etc.
- 20. Pine Tree state
- 25. Sum is greater than the whole
- 26. Faithful assistant
- 28. D in LED
- 30. Oak or maple
- 32. Moon of Saturn

## Answers to crossword from Feb. 10 (clue numbers after 24 were off by 1)

- |                     |                |                  |
|---------------------|----------------|------------------|
| Across              | 46. Or so      | 14. Philadelphia |
| 03. Acid            | 47. ESP        | 16. Mac          |
| 05. Erie            | 48. Gaea       | 17. Anaconda     |
| 09. Salem           | 49. Ur         | 18. Harrisburg   |
| 13. Tap             | 50. Esop       | 19. Ali          |
| 15. Song            | 52. Pittsburgh | 25. Yarn         |
| 16. Manhattan Beach | 53. Orbit      | 26. Ine          |
| 21. Ottoman         | 54. Eats       | 27. Conquest     |
| 22. Allentown       | 55. Leaflet    | 29. Decrepit     |
| 23. Carrion Crow    |                | 30. Eel          |
| 24. Lyric           | Down.          | 32. Measure      |
| 28. USA             | 1. Bamboo      | 33. NTSB         |
| 29. DEA             | 2. Titan       | 35. Erase        |
| 31. Anno Domini     | 4. Dac         | 36. Aerosol      |
| 34. Seaweed         | 5. Folly       | 37. Wae          |
| 38. Green           | 6. Rot         | 38. Galop        |
| 39. Nests           | 7. Internet    | 43. Boise        |
| 40. Treacle         | 8. Ego         | 44. Tata         |
| 41. Ant             | 9. St. Louis   | 45. Nabs         |
| 42. Dabs            | 10. Athens     | 48. GTE          |
| 43. Bearer          | 11. Lancaster  | 51. Ore          |
| 44. Tuna Sub        | 12. Entr       |                  |

# calendar

**2/17/20 -  
2/23/20**

**100 Years Stray**

2/19/20 - 2/21/20

Carnegie Mellon School of  
Drama

**Into the Woods**

2/20/20 - 2/29/20

Carnegie Mellon School of  
Drama

**Detour Festival**

2/21/20 - 2/22/20

Studio Theatre

**In Case You Missed It**

2/21/20 - 2/27/20

Row House Cinema

**Battlezone XIII: 1v1**

**Breaking | 2v2 all**

**styles 2/22/20**

6-11:59 pm

Cohon Center

## ongoing

**Orchid and Tropical  
Bonsai Show: Out of  
This World** Until 3/8/20

Phipps Conservatory

**Keanu Reeves Week**

Until 2/20/20

Row House Cinema

**Little Shop of  
Horrors** Until 2/23/20

Pittsburgh Public Theater

**2/24/20 -  
3/01/20**

**Memory Habit**

2/26/20 - 2/29/20

Carnegie Mellon School of  
Drama

**Black Culture and  
Fine Arts** 2/28/20

10p.m. - 11a.m.

Black Chairs

**Lunar Gala 2020:**

**Yesterday** 2/29/20

8pm, Wiegand Gymnasium

**Pittsburgh Art &  
Lectures: Colum  
McCann** 2/26/20

7pm - 8:30pm

Carnegie Library Lecture  
Hall

**Semi Annual Dollar  
Sale**

2/28/20 - 3/1/20

Avalon Exchange

**Internet Cat Video  
Fest 2020**

2/28/20 - 3/5/20

Row House Cinema

# *From the Archives:* Pittsburgh in 2010



left photo by Alexandre Kaspar | Staff Photographer  
right photo by Jonathan Carreon | Staff Photographer  
layout by Sahaana Sethu | Visual Editor