The California Tech

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HEAR FROM THE CANDIDATES: THE ASCITTOWN HALL

ASCITTOWN HALL

Sherry Wang | Staff Writer

In anticipation of the upcoming AS-CIT election, *The Tech* held a Town Hall on Friday evening to provide the general student body a chance to get to know the candidates and ask specific questions about their positions. For each position, candidates were given 2 to 3 minutes to make a statement before a Q&A session. Questions were drawn from submissions on Slido and supplemented by questions from the moderators.

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ANALYSIS: SECURI-TY STAFF PROJECT-ED TO INCREASE

SHERRY WANG | STAFF WRITER

A recent proposal for an increase in the security presence on campus from 28 to 34 officers has presented an opportunity to examine the role that security plays in our community. According to the standard guidelines for the allocation of personnel published by the Department of Justice, the metrics that most impact the number of personnel assigned to a campus are the total num-

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CHATS WITH KATZ

Jennifer Du | Staff Writer

A lot of people think of you as their favorite professor.

Hmm, that's frightening.

Why do you choose to teach the more introductory math courses compared to something that's more advanced?

I really like the Caltech curriculum, and I want to make sure it works. In order for the core to really work, the classes have to build on one another. I think a lot of the time, people who are teaching them think, "Well I'm just teaching my class and I don't have to worry about anything". So I spend a lot of time thinking about how everything should fit together

When I came here I really wanted to teach 1a because 1a is really just beautiful. I happily taught it for about 4 years and then I started finding out that there were other courses with more problems, like 2. Now I'm teaching 1c because I think I have good ideas about how 1c should work.

What did you want to do when you were young?

I certainly had my ambitions to be president, and when I was 9 I wanted to be a chemist in order to blow things up. And by the time I was 15 or 16 it was pretty clear what I was going to do.

We were an intellectually oriented family, and I was the more mathy of the siblings. I have one sister. She is a linguist, and she lives off the grid and works with chimpanzees.

What do you plan to do when you retire?

I don't know. I'm not completely sure I'm going to retire. If I was serious about retiring, I could do it in two years but it would be an extremely stupid thing to do because my job is kind of the best thing I have.

What do you do for fun?

I watch TV, and I play chess. I watch Game of Thrones. I'm very excited we're entering the last season of Game of Thrones, but I watch a mishmash of other things like Osmosis, which is a Netflix series about people who connect cyber implants in order to find true love. Things like that.

What do you do on the weekend?

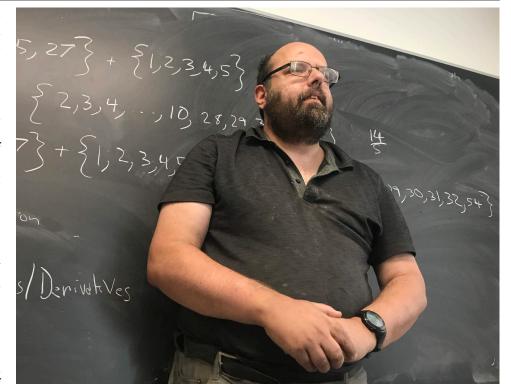
I actually typically work on the weekend. I have an office hour on Saturday so I'll spend a lot of Saturday catching up on work.

How did you meet your wife?

We met when she was having a job interview at a place where I was employed, and while that job interview was going well, the people who were in charge of the department kept me away. At some point, the whole thing kind of fell apart. And then she hung around for a day without much to do because everyone knew that the offer wasn't going to happen the way it was supposed to happen and then I met her. And this resulted in minus one hire because I ended up leaving there because she went elsewhere.

What does your wife do?

She is a math professor and department chair at Indiana. She's going to have a sabbatical for a year after that. I'm having a sabbatical next year too. I'm going to Indiana, I'm sort of behind on taking care of kids so I get to be the one that has to deal with the kids for about a year.



Jenny Du | The California Tech

What's your favorite childhood memory?

I don't quite sort memories that way. Yeah, I don't know how to answer that question.

I was sophomore treasurer in high school. I was 12. I should not have been sophomore treasurer and I was not a very good sophomore treasurer either. But there was an election and we got to campaign for one day for this position. I gave a speech which my sister helped me write, but I did manage to present the speech properly. There was this moment that the entire class of eligible voters decided they weren't going to vote for who they were supposed to, they were going to vote for me.

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ASCITTOWN HALL

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TREASURER

For the position of Treasurer, the candidates were Yuying Lin and Alex Krotz. Lin's platform is focused on increasing transparency of how funds are allocated across different events, and increasing accessibility and awareness of the events that ASCIT does put on. Krotz's platform is focused on increasing transparency of where ASCIT's funding comes from, and how different bodies influence the decisions that ASCIT makes due to their financial sway.

Do you have any experience working with or setting large budgets?

Krotz has served as treasurer for the Chemistry club, which has a smaller budget than ASCIT but encountered some large, unplanned expenditures. Allocating the funds to account for the unexpected expenses as well as continue normal operations was "interesting", and the experience gives Krotz the confidence to "do the same for a larger amount of money." Lin was social coordinator and vice president of student council in high school. As part of the responsibilities of those roles, she helped to plan the semiformal for around 400 attendees, which is "almost the same as the ASCIT formal." She oversaw the budget for her high school council at a high level, and thus had an understanding of the way funds were allocated across the board, rather than calculating individual expenses.

Would you support an ASCIT dues increase, and if so, how much?

Lin would not push for a dues increase, but rather try to "shift where the money goes." Krotz suggests a dues increase should be put to a vote, with the understanding that a dues increase would allow ASCIT to put on more events.

Will ASCIT accept donations?

Krotz states, "ASCIT will not accept donations. ASCIT is a tax-exempt organization, and accepting donations over a certain amount of money would remove that exemption." Lin also believes that ASCIT should not accept donations due to the potential for donors to affect ASCIT's actions.

One of the big roles of the ASCIT Treasurer is to help file taxes. Do either of you have experience filing taxes? How do you feel the taxes should be done (solely by ASCIT, or continue current conjunction with administration)?

Krotz believes that conjunction helps prevent errors in the tax document. He incorporated a 501(c)(3) nonprofit 5 years ago, and has been filing taxes for it since then. Lin similarly believes that conjunction is beneficial in this instance. She does not have experience filing taxes, but is confident that she can learn it.

Both candidates mentioned increasing transparency. In what way would you increase transparency? (E.g. itemized receipts, or more generalized reports?)

Lin would want to providing more specific details (such as how much was spent on decorations at formal), and to do so in the form of publishing a spread-sheet of expenses. Krotz believes it is important to provide all the information, but providing a more general picture is more digestible and informative.

DIRECTOR OF OPERATIONS

Rachel Sun is running unopposed for this position. She previously served as ASCIT secretary, and in that role, learned about the issues surrounding the miscommunication between students and administration, and became familiar with the role of each member on the Board of Directors (BoD). Especially in light of the issues surrounding The Tech in the past few months, she sees the importance of giving the students a voice. As Director of Operations, she wants to champion student voices and increase awareness of events around campus. Of particular concern is club funding; due to the sudden and unexpected removal of funding, operations were disrupted last year, and Sun wants to make sure that clubs and publications have the necessary resources despite budget cuts.

Are there concerns that your oversight of *The Tech* will compromise journalistic integrity?

Sun feels that the primary problem with *The Tech* is not so much censorship from administration, but rather poor journalistic quality. In particular, she notes that Joe Shepherd's concerns regarding *The Tech* is in the way that news is reported, and how that creates a liability problem for Caltech. Miscommunication between *The Tech* editors and administration is causing the problem to "come to a head" and she hopes that by taking on the role of Director of Operations, she can act as a liaison between the two groups and "make sure everyone is on the same page."

Do you think it's good that there are unopposed elections?

"No. No, I really don't. I don't like running unopposed, and personally, it feels weird because students don't get to choose [...] what interests they want to pursue."

ARC CHAIR

The candidates for this position are Daniel Neamati, Arushi Gupta, and Michael Yao. Neamati is currently serving as ARC Rep for Ruddock, and also as an at-large rep. His platform revolves around updating technologies like Moodle to cater to the needs of students and faculty. Yao has been working with the ARC for the past two years. His focus is on creating more positive student-faculty interactions (such as through such programs as Student Faculty Lunches, organizing and creating Course Compliments). Gupta is currently ARC Secretary, and previously served as ARC Rep for Dabney. Her platform focuses on implementing various proposals from SFCs over the years.

How will you combat student apathy, and get a fair representation of the academic views from the student body at large?

Yao wants to increase transparency to make the ARC and its actions more accessible to the general student body by continuing to publish minutes, and moving meetings to a more public location. Neamati wants to increase representation of houses that are disproportionately underrepresented in student government, and in the ARC in particular. Gupta wants to maintain the open atmosphere of ARC meetings, and increase student participation in such events as the SFC.

Are there any improvements to TQFRs that you would like to push for?

Gupta states TQFRs currently are too long and do not represent the questions that students want answered. Although changes to make TQFRs shorter and more useful have been planned, the timeline for making updates to REGIS is backlogged so she hopes the changes will come into effect soon. Yao states

that completely revamping the TQFR system is unrealistic, and that he wants to make more incremental changes instead. He references his contribution to making promotional materials to help students write better, more useful, comments. Neamati states that TQFRs are currently managed largely through, and in collaboration with, IMSS. He plans to work more closely with IMSS to make changes. In particular, he wants to re-examine the statistics collected in the survey, and points out expected grades as an especially "problematic" area due to its susceptibility to bias.

DIRECTOR OF SOCIAL ACTIVITIES

The candidates for this position are Irene Chang, Simon Lequar, and Jeffrey Ma. Chang is a peer advocate and served as interim treasurer last term, so she is familiar with the people and processes of the BoD. Her goals for the role of Social Director are to improve event planning (such as allocating sufficient resources for formal) by increasing feedback on events to better cater to what students want, to work with House Social Directors to have a united voice in conversation with administration, and to continue normal operations under a stricter budget by partnering with the Y and the Executive Social Committee (ESC). Ma states that social events were one of the main reasons why he chose Caltech as a prefrosh, and that maintaining social activities will be important to continue to give prefrosh a positive impression of Caltech. He hopes to work with House Social Teams to "better gauge interest" and improve event planning by uniting ASCIT and House funding. Lequar wants to increase "cross-house pollinated events" and other events that "bring together people from across campus.' He notes the importance of gauging interest in events rather than just using historical data, and wants to extend social events to activities in the greater LA area rather than just events like Midnight Donuts and Movie Night.

Would you consider putting the existence of ASCIT Formal to a campus-wide vote?

Chang states that since ASCIT is student-run and funded, students should be given the opportunity to voice concerns with the way in which that money is spent. Ma states that Formal is a divisive issue, so while every student should have a voice, putting its existence to a vote is endangering an event that many students look upon with fond nostalgia. Lequar suggests that instead of a binary yes/no vote, asking more specific questions to gauge interest in the event itself (independent of ticket sales), and what changes should be put in place, would be more useful.

If the social budget is cut due to reallocation in the ASCIT budget, how would you combat that?

Chang forsees a budget cut, and that she has experience operating under a tighter budget from her time serving as interim treasurer. She proposes hosting joint events with Houses and the Y to reduce the budget limitation, and that as social media director for the Y, she believes it would be possible to create these joint events and to increase student awareness of events hosted by the Y (independent of ASCIT). Lequar wants to investigate per-student funding, and to prioritize funding for on-campus events. Ma agrees with the other candidates in that partnership with House Social Teams would allow for large events (such as the "cross-pollination" events) despite limited ASCIT funding, and that he would prioritize events with greater student interest.

PRESIDENT

The candidates for this position are Varun Shanker, Alejandro Lopez, and Craig Worley. Worley states, "anyone up here can do the job, so vote for whoever you want. This is a position that has not as many defined roles, which means it is up to the president to decide. If you read my statement, you'll notice I have no promises. I view promises as a perfect excuse to make the system inefficient. [...] That's why I'm here to listen to the people." He points out the role that the IHC plays in advocating for students in the Houses, and proposes that his role as president would be to advocate for those who are not affiliated with the Houses. Lopez states that student government is one of the defining characteristics of Caltech, and that he has been involved for the past three years through different committees. His platform is to make ASCIT more responsive to all students, and to run more cohesively and efficiently across all its different committees. In particular, he wants to increase the role of ESC for campus events, and the role of ASCIT on issues outside of Caltech. Shanker is currently serving as Director of Operations, and served as interim treasurer before that. His recent efforts have been focused on improving *The Tech*, and he hopes to make improvements to the advising system for more consistently high-quality advising. He also hopes to improve the relationship with administration so that student opinions are heard, and changes like those to room picks are not made independendent of student input.

ASCIT has essentially been defunct for a while now. How would you ensure that ASCIT actually hears student concerns and does more than Formal and donuts?

Shanker believes that ASCIT should be proactive (rather than reactive as it has been in the past few years), and should seek out the opinions of those students whose opinions are not represented in surveys. Worley suggests increasing advertising for ASCIT activities so that those who have opinions are able to express them. Lopez believes that ASCIT needs to re-examine its role in the community, and decide whether it is an advocate for students or a business providing services like Donut (the website). He plans to hold town halls with administrators to improve communication.

What are your top priorities regarding what ASCIT should do next year?

Worley believes that some committees (ARC and IHC) are autonomous and do not require more supervision. He notes that it is hard to say what situations may occur in the next year, and therefore cannot predict what will become a top priority. Lopez's top priorities are transparency (especially with the budget), and democratizing the decision process so that ASCIT can more accurately reflect student opinions. Shanker also values transparency, and plans to publish more detailed breakdowns of how the budget is spent. He also wants to maximize the impact of social events so that it is not just the same fraction ("over half, but still a fraction") of campus that is attending these activities, and to maintain or increase club and publication funding.

Do you think the current ways of dealing with administration have been effective? What would you change and how would you involve the student body more?

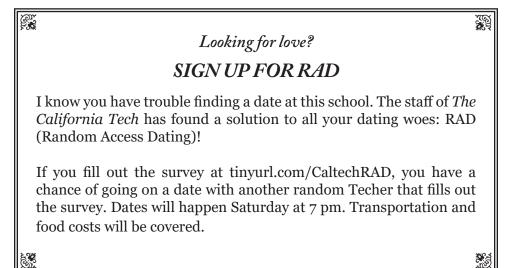
Lopez notes that the biggest change he has observed over the past three years as been administration's increasing unwillingness to meet with students directly, and using student government as an intermediary instead. He states that while this allows students to have a more cohesive voice, but also allows administration to dodge questions. The root of the tension between students and administration is the difference between how student government sees itself as a democracy, and administration expects that the goals it makes will be met, so ensuring that communications are civil will help bridge the gap. Shanker states that administration answers to more than just the students, so their priorities are going to reflect those of the Board of Trustees or the Caltech image as a whole. By taking on a more proactive role and suggesting better solutions rather than taking a reactive position and only expressing negative opinions, AS-CIT can provide better results and "foster [a better] relationship between students and administrators." Worley states that students tend to react in a confrontational manner, and this causes administration to "clam up," so unifying student responses will achieve more desirable results.

Craig, if you're elected, would you actually hold office?

"Yeah, I'm serious."

Would you be willing to hold an up/down vote on bagels and morning donuts?

Lopez states that morning bagels and donuts only came into existence due to a meme 20 years ago, and thus a vote would be fair. Worley suggests a vote with multiple options (including abolishment, moving locations, and keeping it as-is). Shanker agrees that there is no reason to oppose a vote on morning bagels, especially since it only affects a minority of students, and the money could be used to fund another Midnight Donuts instead.



ASCIT BOARD OF DIRECTORS MEETING

Minutes for 17 April 2019. Taken by Rachel Sun.

Officers Present: Sakthi Vetrivel, Erika Salzman, Sarah Crucilla, Varun Shanker, Alice Zhai, Dana He, Rachel Sun

GUESTS: Kevin Gilmartin, Joe Shepherd, Tom Mannion

CALL TO ORDER: 12:10 PM

PRESIDENT'S REPORT (SAKTHI):

Have been talking to Dean Nye about changes to FCC selection to allow for better representation of all the groups on campus and other frosh camp changes. Have had to cut back on social events in order to fund alternate interhouses and movie nights due to lack of funding from usual funding sources. ASCIT Elections are happening on Monday.

Officer's Reports:

V.P. of Academic Affairs (Erika):

Have more course capture this term than ever before with 4 courses offered. May need more funding for equipment as this program grows. SFC happened in March. All SFC presentations are on the ARC website. Moving forward with honor code and option advising proposals and looking into issues with student attendance. Pushing for the computation in core proposal. Set up meetings with the Math option representative regarding improving math core lecture attendance and usefulness.

V.P. of Non-Academic Affairs (Sarah):

Prefrosh Experience occurring on a weekday was hard for a lot of students to balance schoolwork and interacting with prefrosh. Additionally, house events were pushed together with a lot of overlap due to earlier quiet hours. The IHC is reaching out to freshmen in Bechtel to get an idea of their experience this year. The IHC had serious concerns about the roompicks process such as last minute changes and lack of communication from housing and student affairs. IHC came up with a plan for future interhouses to discuss safety regarding alcohol, increasing Orange Watch numbers, meetings before and after each interhouse to ensure everything goes well and work on improvements for future interhouses.

DIRECTOR OF OPERATIONS (VARUN):

ASCIT Screening Room in the SAC has been renovated. Working on moving the recording studio to Hameetman. Working on improving *The Tech*.

TREASURER (DANA):

The Tech is requesting more funding.

SOCIAL DIRECTOR (ALICE):

Had ASCIT Formal on a yacht and initially received a lot of complaints as tickets ran out quickly. MHF impact report has submitted. Movie Night is scheduled for Monday April 29. Complaints from house social directors regarding round table meetings and event selection committee.

SECRETARY (RACHEL):

Nothing to report.

If anyone has any questions or concerns about a section of the minutes please email the appropriate officer. We are happy to answer any questions.

MEETING ADJOURNED: 1:05 PM

IHC WEEKLY UPDATES

ALICIA TIRONE | IHC SECRETARY

This week, the IHC discussed agenda items with Felicia for the coming year. The IHC has often dealt with the aftermath of administrative change rather than having continuous discussion with administrators to reach solutions. To prevent this issue in the future, we have made a discussion timetable with Felicia regarding the individual agenda items that the IHC wants to work on this year.

This term, we will be discussing multiple issues, including revisions to the alcohol policy, Orange Watch changes, the rotation schedule, RLC/RA hiring, roompicks, the PA program, and Bechtel feedback. Given concerns over alcohol following Lloyd Interhouse, there will likely be revisions to the alcohol policy that will be finalized by July. Regarding the Rotation schedule, we will specifically address the fact that Rosh Hashanah is during Rotation, as well as focus on House event, dinner and dessert scheduling. This agenda is still flexible; if there are other topics of concern to students, please let us know.

As a part of this initiative to have more prior input on administrative decisions, we will also be assigning IHC representatives to different departments. One of the key issues with roompicks was that the IHC and students were not informed about the decision making process or timeline, leading to additional confusion. Having a representative from the IHC who will meet with their assigned department and provide updates for the IHC will hopefully help address this issue. The representatives will be responsible for scheduling monthly meetings with their departments for updates about coming changes. The representatives are tentatively as follows:

JOE SHEPHERD: Sarah Crucilla

DEAN'S OFFICE: Sarah Crucilla and Andy Rothstein Joe Bennethum: Alex Guerra and Adrian Huang DIMITRIS SAKELLARIOU: Amrita Rhoads and Alicia Tirone

Admissions Office: Ben Cassese PA Program: Rupesh Jeyaram

SECURITY DEPARTMENT: Alex Wuschner and Rupesh Jeyaram

SUE CHIARCHIARO: Alicia Tirone JAIME REYES: Amrita Rhoads

ATHLETICS DEPARTMENT: Andy Rothstein

DIVERSITY/CCD/TITLE IX: Alicia Tirone and Sarah Crucilla

ROTATION RLC REPRESENTATIVE: Eli Pinkus

The IHC briefly discussed Ruddock Spring Party, which had little to no alcohol or security related incidents and went well overall. We also discussed potential ways for Blacker Interhouse to go similarly well, such as having an additional on-call person in each House. Given the current alcohol situation on campus and the number of incidents last week, it is likely that if Blacker Interhouse goes poorly, then future Interhouses could be in jeopardy.

Additionally, the IHC discussed the Cases of Concern Committee. Changes to the name of the committee and to the description of the committee were proposed, since the Cases of Concern Committee deals with a range of student issues. We feel that the current description of the committee is misrepresentative of its actual function. The IHC minutes on the website provide more specifics about this topic.

Finally, we discussed ways to make the IHC more transparent, such as having a focus group with frosh in Bechtel and sending out the IHC feedback survey over House mailing lists. We are looking for more ways to reach out to upperclassmen and solicit input from all parts of campus. If you have comments, you can now submit feedback at bit.ly/IHCFeedback and leave your name if you want me to get back to you. You can also email 2019ihc@googlegroups.com or email me directly at atirone@caltech.edu. Open IHC meetings are 12PM every Sunday in SAC 13.

ARC MEETING MINUTES: APRIL 21, 2019

Present: Erika Salzman, Arushi Gupta, Olivia Grabowsky, Schuyler Dick, Daniel Neamati, Michael Yao, Amy Wang, Maggie Lee, Tanvi Gupta, Alice Jin, Alejandro López

PROGRAM RECAP: This term's software seminar, on GDB, was held on Saturday. Thank you to David Elliott for leading the seminar. We will post slides online, along with a recording of the seminar. There was a decent attendance; approximately 20 people showed up. Looking ahead, we hope to hold a LaTeX software seminar early in fall term. We will reach out to professors to find people to host future Mathematica seminars, since Tal (who has lead the seminar for the past few years) is graduating.

PROGRAM UPDATES: Ombuds training will be held this coming Friday (4/26), at 12:15 in the CTLO. It is geared towards first-time ombudspeople, but everyone is welcome! Course concerns had a meeting last Friday, and we have divided up the divisions/departments among the people interested in working on course concerns, which should help make responses faster.

The research FAQ page was published on the ARC website (arc.caltech.edu under the "Resources" tab)! Please check it out if you have any questions about how to participate in academic research. The ARC has started digging into analytics, and we have set up a Google analytics page to better track visitors to the ARC website.

ARC leadership has set up a meeting with people from the math department (the option rep, EO, and option administrator) to discuss some concerns surrounding math core, especially regarding low lecture attendance.

SUBMITTED BY: ARUSHI GUPTA

ARCTIP OF THE WEEK

Ombuds training is on Friday, April 26. Please sign up to be an ombudsperson! Also, please speak to your professor about adding ombudspeople, especially for larger classes.

She was a cheerleader. So I won the treasurership against a cheerleader. It was kind of scandalous.

How did it feel to be so young compared to everyone else at college?

I was very happy. I felt very free there, and I suppose one thing that was not so great about it is that I wasn't completely one of them or something, but I was never completely one of anybody so it didn't feel so awkward to me, it felt very liberating.

How were the parties at your college?

I went to Rice. I didn't like them terribly, they were usually too loud for me. I prefer to be able to hear what other people are saying.

What kind of music do you listen

I like something called filk. My sister liked to go to science fiction conventions, and one of the things people did there was sing songs. They would sit in circles and sing songs about various fannish things, particularly Star Trek. My sister was not musically talented but she could write verse very well, so she would write lyrics and drag me along to these filksings. I would have to try to sing her songs. I ended up really liking that kind of music.

Many famous filkers are known names in science fiction, because some have written books. Sometimes they hold filksings. About two weeks ago, I was really tempted to run off to Arizona because Leslie Fish is one of the most famous filkers. She announced on her Facebook page that she was having a filksing at her house and I almost did it. If I was a sociable person, I could hold a filksing every week. I would find 10 friends who wanted to filk with me and that would count as a filksing.

Do you believe in ghosts?

Um, not in any literal sense, no.

Do you prefer chalkboards or whiteboards?

I much prefer chalkboards. Not every office in the building is like this but I insisted, and now I have the most chalkboards of any office in this building. On the other hand I've started to warm up to whiteboards a little. For instance if all of the walls in this building were whiteboards I think that would be a great improvement. But they aren't, no one should try writing on this wall.

Where is your favorite place in the world?

There are places that I like to go and spend a lot of time at. I guess this is one of them. When I go to places just to be at the place without having a purpose, then I don't really want to stay there too long. I don't like vacations very much. For a long time, I would never go on vacation. I travel a lot because there are lots of math conferences all over the place but I would never go anywhere just for a vacation. Very recently I started having vacations and they weren't so bad.

What does your name mean?

It's a Hebrew name, it means hawk. My parents had interesting ideologies and all of the children were named as birds of prey. My sister's name means

Do you know who's your favorite High **School Musical character?**

No, I can't help you with that.

Tell me a funny story about your life.

I was in college young, and the reason I was in college young was because I graduated from high school early, and the reason I graduated from high school early is that I was promoted three grades, and the reason that that happened was because I went to a math contest. I went to a high school math contest when I was in sixth grade, but the grade levels that were allowed were only high school grade levels. I competed in the ninth grade level contest and placed, and then I got disqualified because I was not a 9th grader. When the high school found out about this, they came up with the obvious bureaucratic solution which was then after that I was a ninth grader.

The coach of the team had known about me when I was in elementary school, and tried to get me to be part of his team. My father did not entirely approve of this idea because he thought that math is not something you have contests about. Sixth grade was when he finally convinced me to go to math contests. The first one I just wasn't in practice, so I didn't do so well, and the second one I placed in. This caused a big

What's a piece of advice you'd like to give to the students?

I want them to have their own ideas about the world and to use the fact that they're at Caltech, which is a really privileged position to be able to develop and present those ideas.

SECURITY STAFF PROJECT-ED TO INCREASE

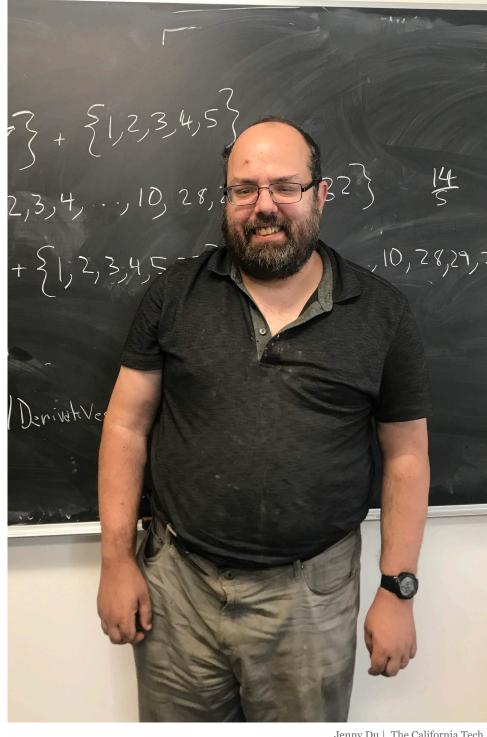
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ber of institution staff, total number of faculty, total student enrollment (both graduate and undergraduate), and the number of buildings on campus that require security services. Using these metrics, the most common method of determining staffing requirements is through comparison to staffing of similar institutions. However, this kind of information is not readily available due to its sensitivity, so we can only make inferences from aggregate values.

The DoJ guidelines states that on average, private universities with total student enrollment between 500 and 2,499 students employs 16.6 campus safety officials, of whom 10.5 are officers. The specific institutions surveyed were not listed, but from a Fall 2012 survey conducted by the Department of Education, 221 private 4-year institutions have 500-999 students enrolled, compared to 462 private 4-year institutions that have 1,000 to 2,499 students enrolled. Assuming the DoJ report sampled institutions uniformly, we would expect the averages given for number of employees to be skewed towards institutions of comparable size to Caltech, rather than towards much smaller institutions.

Examining another metric, the DoJ reports that for campuses with 51-75 buildings, the average number of overall staff is 28, of which 22 are officers. For campuses with 76-100 buildings, the average number of staff is 32, of which 24 are officers. Our campus has between 70 and 100 buildings, depending on how joined buildings (like Kerckhoff, Alles, and Church) and graduate student housing are counted. These values are closer to the number of security officers on campus, and suggests that metrics other than those published in the guidelines were used to determine the necessity of an increased security presence.

One notable external factor not discussed in the DoJ guidelines is local crime rate. Head of Caltech Security, Victor Clay, has stated that at Caltech "statistically, nothing ever happens here", and has described this area as more of a nuisance than anything else to the Pasadena Police Department. Pasadena is known to be fairly safe overall, and particularly so south of the freeway and east of Lake. Despite the circumstances surrounding the campus lockdown in October 2016, there is no real need for campus security to serve a dual role as police. While an increase in security presence on campus can be justified through comparison to aggregate statistics, the context of south central Pasadena seems to reflect an aggressive approach that comes off as overbearing rather than justifiably precautious.



Jenny Du | The California Tech

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TIGER WINS MASTERS

Jacob Ressler-Craig | Staff Writer

Fourteen years after his last victory at Augusta, and eleven years after his last major, Tiger Woods won the Masters with a two putt on the final hole Sunday. The victory completes one of the greatest comebacks in sports history. Since his last major in 2008, he has fronted tabloids for his infidelities, undergone knee and back surgeries and suffered from pain-killer addiction. In this dramatic rise and fall, he's become a defining figure of the last two decades. He has inspired us in his dominance, disgusted us in his scandals and motivated us in his unwavering grit to return not only as the golfer we knew but as a better man and father.

In his years away from golf, we witnessed a wave of players molded in Tiger's likeness. We saw dramatic competitions, close tie breakers, and ever-changing world rankings. But golf without Tiger was just golf, just a corporate game on fields many of us will never see. Tiger definitely was not that. He was a young kid from Long Beach, trained relentlessly by his father on the Navy course of Los Alamitos, who managed to catch the world's eye. For twelve years, he dominated the traditionally rich, white game. He won by lengths unimaginable and forced golf to literally change its courses.

In 2009, his life blew apart. After tabloid rumors and a suspicious car accident, his mass infidelity became public. He lost most of his sponsors and even more of his public reputation. He was forced to take an "indefinite break from golf". For many non-sports fans, this is what they remember of Tiger, an adulterous black golfer stripped of his glory. However, this memory refutes the full circle of his story, his rise, fall, and final redemption on Sunday.



In 1997. Tiger won his first Masters, breaking the record by outpacing his opponents by twelve strokes. In his celebration, he gave a long hug to Earl Woods, his father and mentor. Twenty two years later, Tiger has won his fifth Masters, a feat unmatched by any golfer in history. In an interesting form of symmetry, Tiger shared a hug with his own son in the same spot he had shared one with his father all those years ago.

Tiger's life, public from television appearances at age 3, reflects our lives; he made mistakes, suffered countless consequences, and returned changed, both physically and personally. He's the rare superstar who seems real, and he's done it all with the odds stacked against him. As a result, his win on Sunday brings more than just a smile or cheer to one's face. His win at the Masters is more than golf. It's the potential redemption for all of us, and in that, it should be celebrated.



Caltech Athletics

WOMEN'S POLO SAVES *BEST PERFORMANCE FOR SENIOR NIGHT*

Mark Becker | Gocaltech.com

The Caltech women's water polo team looked as good as ever in its 12-goal performance against Whittier College Wednesday night, the final home game of the year for the team's four senior members.

The Beavers outscored the Poets 5-3 in the fourth quarter and consistently posted highlight-worthy goals throughout the game. Senior Katie Johnston (Livermore, Calif. / Livermore) scored one of her six goals on a second-quarter hustle play in Whittier's zone, winning a scramble with the opposing goalkeeper before flipping the ball into the net from short range. Johnston would score another great short-range goal in the fourth quarter thanks to a beautiful pass from classmate Brittany Percin (Lake Tahoe, Calif. / Stanford Online) from the other side of the Poets' net. Percin scored three goals herself, and now leads Johnston by one goal for the career scoring record with one game to play. Both players also had assists and Percin factored in defensively with a trio of steals.

Senior Gemma Takahashi also got on the board with Caltech's final goal of the game. Caltech's fourth senior, Hana Keller (Sammamish, Wash. / Tesla STEM) added two assists and now has 11 on the year, a career-high. Freshmen Yuying Lin (Scarborough, Ontario / Victoria Park C.I.) and Sophie Devoe (La Jolla, Calif. / Bishop's) also scored for the Beavers. Freshman goalkeeper Zoe Rock (Chappaqua, N.Y. / Horace Greeley) contributed in net with four saves, two of which came on breakaways.

"DC EMBRACES HEARTFELT CORNINESS INSHAZAM!"

Jack Lloyd | Film Critic

The DC cinematic universe has had a rough time trying to compete against Marvel's absolute dominance of the comic book film market. Botched jobs like Suicide Squad (2016) and Justice League (2017) have given the impression that the DC pantheon lacks the calculated planning and quality control that Kevin Feige has perfected with the Avenger's lineup. However, after so many mediocre or failed projects, DC has finally made a great film. Shazam! is a near-masterpiece of a family-friendly superhero movie and sets a new standard in sincerity for both DC and

Shazam! centers on wily foster kid Billy Batson (Asher Angel). Billy has just been placed in a new foster family with 4 other adopted siblings and two loving parents, all of whom he distrusts and distances himself from. Meanwhile, a powerful wizard is battling the demonic forces of the Seven Deadly Sins that are wielded by the evil Dr. Sivana. Unable to continue the fight, the Wizard gifts his magical powers to Billy so that whenever Billy says "Shazam!" he transforms into an adult superhero (Zachary Levi). It's a very old-fashioned comic book story but the movie is fully aware of its own corniness and chooses to indulge in it.

In a huge divergence from the DC 'adult' superhero opuses like Man of Steel (2013), Shazam! doesn't take itself very seriously. A good part of the movie is a straight comedy as there's a lot of laughs mined from the kid-in-adult-body trope. Billy learns about his new superpowers and then immediately uses them for a bunch of dumb ideas a typical 14-year old boy would think of. It's fantastic and completely believable. But the comedy is just the coating on the movie's strong characters and messages. Shazam! has a lot of heart. Billy and his comic-nerd/foster-brother Freddy (Jack Dylan Grazer) grow over the course of the film as they battle the forces of evil and learn the meaning of family and heroism. It sounds cheesy (and it is!), but it is also well done. The film gets you invested in these characters, their motivations and their flaws so that when they actually act heroically, it is genuinely moving. This isn't watching CGI buff dudes punch each other to stop some universe ending event. These are real characters, pushing themselves to do good things.

The movie would not be able to so effortlessly combine comedy, heroic action, and sincerity if it wasn't for the fantastic job done by Zachary Levi as Shazam. He is completely convincing and entertaining as a cocky 14-year old trying to act 30. The rest of the cast is decent all-around. One of my few complaints is that most of the foster family (especially the parents) are kind of tangential for a good chunk of the movie, and they are not as convincing as the two leads. However, one of them is college bound for Caltech and it's always nice to see us get a shout out from Hollywood. The villain, Dr. Sivana, is played by Mark Strong who continues to be one of the most evil looking actors in the business. He has a great origin story and motivations that complement Billy's own. His scenes also have a fair bit of spooky-scary stuff thrown in. The director David F. Sandberg has a background in horror movies and it really shows. Outside of these horror parts though, the action is pretty standard and honestly a little bland.

All in all, Shazam! is great. It is goofy and tongue-in-cheek at times, and scary and thrilling at others, but it is always heartfelt. Good job DC, you did something right. 4 out of 5 stars.

NGUYEN BECOMES TWO-TIME SCLAC *ATHLETE OF THE* WEEK

Mark Becker | Gocaltech.com

Senior Derik Nguyen of the 25th-ranked Caltech men's tennis team has been named SCIAC Men's Tennis Player of the Week for his role in the Beavers' best victory to date, a 5-4 triumph over No. 14 Pomona-Pitzer Colleges this past Friday. Nguyen's second player of the week achievement comes just over two years since last receiving recognition as a sophomore.

With Caltech having rallied to regain a 4-3 match lead just minutes prior, Nguyen completed a successful twoset rally to pull out a 3-6, 6-4, 6-2 win, breaking his opponent in the final game of the match in order to do so. Nguyen also scored a singles win for Caltech at Chapman University less than 24 hours later and went undefeated on the weekend at second doubles with freshman partner Patryk Kozlowski (Irvine, Calif. / University High). Nguyen and Kozlowski won both matches this weekend by a combined score of 16-7.

Nguyen's efforts have helped force the Beavers back into the SCIAC playoff conversation. With a pair of regular season matches yet to be played, Caltech can control its own playoff destiny but will have to settle for the fourth seed unless they end up tied with the Sagehens, in which case the Beavers could vault to third and draw a slightly more favorable matchup.

Head Coach Jason Cohen and the Bea-

vers will return to home court on Saturday, Apr. 20 to host Whittier College on Senior Day, but first must contend with the SCIAC - and nation's - top-ranked team in Claremont-Mudd-Scripps Colleges the day prior on the road.



Caltech Athletics

EDITORS' NOTES

We are all very tired of this. It is really hard.

We hope you enjoy this special Monday edition of The Tech.

50 YEARS AGO: PRAV-DA ON REAGAN

Translated by William Devereaux from an article entitled "Gold Fever" in March 25, 1969 issue of the Soviet party newspaper Pravda.

Yurii Zhukov | Soviet Propagandist

An interview was granted to me by the governor of California, Ronald Reagan, a man famous to some extent for his, to say the least, extremely right wing views.

Reagan himself is a former star of the Hollywood movies and television, and in the political life of the USA a great deal depends on the fact that a political figure during his career is held under the searching eye of the television camera. In the course of the pre-election campaign the rival of Reagan, his predecessor in the post of governor, Democrat Brown, attempted to cut him by a caustic question in a television battle. "How are you, an actor, not possessing experience in government service, able to lead the largest state?" But Reagan was not embarrassed. "I played the roles of kings, so that in the role of governor I'll manage somehow." He said with a dazzling smile. In the end the voices of the voters moved over from Brown to

So here I am in the consulting room of the governor. A tall, athletic appearance, in an elegant light suit, always with the dazzling Hollywood smile on his face, he is sitting at an immense desk, he leans back in his armchair. Under his feet is a glittering sheet of plexiglass, which covers the carpet. Ronald Reagan receives the representative from "Pravda" extremely courteously – one feels that it gives him pleasure to point out to a Soviet Communist how great and rich his state is, imagining himself, as they like to say here, "a piece of the 21st century."

"I'm very proud of California" says the governor. "This is a classic example of free enterprise. We are in fifth place in the free world according to gross national product"

"In fifth place?"

"Yes. In first, of course, stands the United States," he is still smiling dazzlingly, "then the Federal Republic of Germany, England, Japan, and California. With our twenty million inhabitants we produce as many goods and services as a hundred million Japanese produce.



"The Gipper"

We make forty percent of all the vegetables and fruits eaten by Americans. We make the larger portion of the airplanes and missiles which join the armaments of the United States. We..."

I stopped listening to the governor for a minute – I was much startled by his raising of the question: for him, California is virtually an independent state. Oh, of course, he is a one hundred percent American, and standing beside him on the desk is the stars and stripes flag eloquently reminding one of this. But California in his view is this quintessence of Americanism, and ten percent of the citizens of the USA live here; it is these utterly peculiar Americans pointing the way not only for America, but also for the whole world.

As far back as 1883 one American writer wrote in a magazine. "In almost all respects California reflects the American spirit – only there is more of everything in her. A geranium there grows unbelievably tall and firm, like a small

tree; a beet, like a giant watermelon. So unnaturally grand that there are fanatics and bigots, fakirs and prophets, mystics and visionaries."

And here I am holding in my hands an excellent printed "Economic Report of the Governor. 1968" — a booklet courteously presented to me by an assistant of Reagan, and pondering over the cost of it, I am discovering the wealth and that really high standard of technical development of California, of which my interlocutor takes pride.

"California has shared heavily in the activity resulting from the Vietnam war," it says on page vii of this document. "The importance of our defense and space industries has made this state a major source of the armaments for modern warfare. Aerospace manufacturing employment jumped by another 48,000 last year and is still rising. More than one-third of our industrial production is in this field..."

Yes, the military-industrial complex in

Public Domain

California has really "shared heavily in the activity resulting from the Vietnam war," as the governor expresses diplomatically. We may say, perhaps more coarsely but more precisely: the monopolies of the USA and Californians themselves take part in an active way in the American aggression in Vietnam and assume with the Pentagon the responsibility etc. etc....

Space does not permit further elaboration of the rather extensive discussion which continues in essentially the same vein. If the propaganda necessary for an article of general internal circulation be ignored, one sees in the author a Russian with prudence, tolerance, shrewdness, intensity of purpose, reflected by his breadth of interest and knowledge, and the humility needed to successfully approach new knowledge.

The "Economic Report of the Governor. 1968" is available in Millikan Library.

FROM THE THROOP TECH, 100 YEARS AGO

The other day an extremely young and inexperienced Freshman was telling us how many things he had to learn how to do. He said that he had to learn how to live, how to concentrate, how to study, how to shine his shoes, how to 'lace' his leggings, how to wear his belt and numerous other things. Still, we can't see where he had any kick coming, for no one asked him to learn how to think. All the foregoing "how to's," except the last, are obviously essential to one's success in life, but the last is absolutely unnecessary. Why should one bother to learn to think? There is nothing to be gained by it, and it's so unnecessary. We can get our religion, our politics, and our style of dress from our parents; out ideas from a book or two; and leave our success or failure in life to Fate. We can go thru college and learn to apply a few ready-made formulas; go out into the world and do the work we are told to do, and do it the way we are told; and then after a "long and successful life;" we can die without having had to go to the trouble of thinking once, during our whole

mundane existence. So after all, isn't it much better never to think?

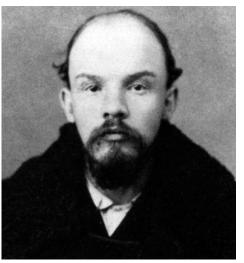
No! A thousand times no! Break the bonds at all costs! Wake up! Learn to think and keep on thinking. Never admit that anyone is capable of doing your thinking for you. The whole trouble with the world today is that people have refused to think until it is too late. Would we have had this war if people had thought about it twenty years ago? Would Russia be in chaos today if her rulers had thought of the monster they were breeding? But these are all post mortems. Nevertheless, as sure as we refuse to think about little things, either as a nation or individually, we are going to have post mortems. As long as we refuse to think we are going to let Opportunity knock in vain.

Dr. Francis told us that anyone who thinks in the terms of 1914 is one hundred years behind the times. Let's catch up. Let us not make the mistake of preparing ourselves to face the problems of 1914, we must be prepared to face the problems of 1924. We must be prepared to take the initiative, we must be leaders and not followers. At present the world is facing the greatest crisis of our era. Do you understand that crisis? Do you un-

derstand the causes? If not, why?

We must think of these things and be prepared to take the reins of power. We have better opportunities than most, and we should make the most of these opportunities, for as sure as we refuse the leadership we perish.

In Russia, the tinkers refused the leadership, and the haters took the reins of power. Do you want such a think to happen here? If not, think! We may call it Bolshevism if we wish, but it is the Nemisis of an unthinking people.



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REMEMBER TO VOTE!

Voting for ASCIT President, Director of Operations, Director of Social Activities, Treasurer, and ARC Chair opens

Monday,
April 22 at
10 am and
will close at
midnight

Make sure your voice is heard!



SWAFF'S PICKS VOL. 1

Izzy Swaff | Music Columnist

Welcome to the first edition of "Swaff's Picks", a music column including new music reviews, upcoming concerts, and a selection of songs that I have on heavy rotation at the moment. For this first edition, here is a playlist of a few songs for your listening pleasure. You can find this playlist on Spotify by scanning the code through the Spotify app.

ALRIGHT - SPOOKY MANSION

From their debut album of the same name, "Alright", is an airy and bouncing indie rock song highlighting their quirky and fun melodies, characteristic to their sound. The beat will most likely have you moving in your seat or at least nodding your head. It's definitely a great one for a sunny Saturday.

THERE'S A HONEY - PALE WAVES

The song begins with a guitar riff reminiscent of the hits of the 80's. It is best described by the genre of indie electronica or electropop, with the beat being driven by a drum machine in the background. The lyrics in the chorus flow into one another giving the song a dreamy vibe.

SILVER LINING - MT. JOY

Mt. Joy does what The Head and the Heart does, but with more energy. "Silver Lining" is their top hit for a reason; it is an anthem for summer road trips, for life advice, and for looking on the bright side of life. The chorus trails off into a guitar solo that brings the energy up all the way to the bare, vocals-only ending.

I'M OVER IT - BLUSHH

Blushh is an indie punk rock band from LA and "I'm Over It" is their angsty answer to life when everyone is against you and you're, quite literally, over it. These two minutes will have you turning up your volume and rocking out.

ELASTIC - JOEY PURP

"Elastic" come right out of the gate with a heartbeat bass thumping throughout the song. This hip hop song has you grooving until Purp stops you in your tracks with the lyrics "Red light, green light, go" and then throws you back on pace. The sound is warm, cadenced, and energetic.

No Halo - Kevin Morby

Deviating from his normal, characteristic melodic sound, Kevin Morby shows us he's evolving. "No Halo" starts with bare lyrics backed only by a clapping beat in the background. The lyrics build and then the song crashes down to a slowed and heavy sound partnered with his storylike voice. Hypnotizing saxophone and flute guide the song to an abrupt conclusion leaving the listener wondering what comes next, from both the storyline of the song and the artist himself.

Donna - Rubblebucket

Groovy and reminiscent of 60's and 70's alt music, the lead singer's voice glides over the song to tell the story of a lover, imagined and real. Heavy baritone sax dives into the song adding depth to the flowy vibes. This prime example of indie dance-pop will have you dreaming and dancing in no time. Rubblebucket's lead singer, Annakalmia Traver, is this edition's playlist cover, shown with a giant rose on her head, playing at the main stage of this year's Treefort Music Fest.

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THE EARNEST C. WATSON LECTURE SERIES

Clouds and Climate **Tipping Points**

TapioSchneider, Theodore Y. Wu Professor of Environmental Science and Engineering; Jet Propulsion Laboratory Senior Research Scientist, Caltech Division of Geological and Planetary Sciences

Low clouds over subtropical oceans cool Earth's climate because they reflect most of the sunlight shining on them back to space. It is unclear, however, how the clouds themselves change with climate; this gives rise to large uncertainties in climate change projections. Tapio Schneider's lecture will show how advances in computing and satellite observations are enabling breakthroughs in the accuracy of climate projections. Such advances have already revealed a tipping point of the climate system: if greenhouse gas concentrations rise high enough, subtropical low clouds may melt away, triggering dramatic global warming.

WED., APR. 24, 2019 • 8 PM

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ASSKISS CANDI-DATE STATMENT

RUDDY McFlem



Ruddy McFlem describing the size of the freedom dividend.

My name is Ruddy McFlem and I am Junior MechE in booty house running for ASSKISS president. Ever since I was a Frosh, I have seen the decline of ASSKISS: the treacherous claws of Admin have been warping the true wishes of the silent majority of the Caltech undergrads.

My platform is simple: take the power back from the "ASCIT" elites and give it back to the people. As ASSKISS president I would reopen Chouse and make it 24/7, I would make every house a sovereign state and I would extend pass-fail from two terms to two years! While I do not back an increase in dues (read my lips), I believe that ASSKISS can solve poverty at Caltech through a true Caltech safety net: a "Freedom Dividend" of 1000 dollars per month. Unemployment after graduation is a major concern at Tech, and with an increasing number of PMA majors having their work almost fully automated by Mathematica, the need for a universal basic income is apparent.

One might say "Ruddy, where do you plan on finding the 12 million dollars required to fund such a safety net?" The answer is simple: MHF grants. With the PMA majors essentially out of work, we can hone their future skills at proposal writing via begging for MHF funds. This approach kills two birds with one stone: the Caltech safety net will make "Every [undergrad] a King" and PMA students will be able to satisfy their technical writing requirement.

In closing, last week my opponent released 10 years of her tax returns. I would do this, but my taxes are currently under audit by the IRS. If you have any non-tax related questions please contact me at rmcflem@caltech.edu.

Thank you. Please Clap.

PLEASE WRITE FOR THE TECH

PUZZLE: KAKURO

Puzzle and instructions from kakuros. com

DIFFICULTY: Medium

Kakuro puzzles are similar with crosswords, but instead of letters the board is filled with digits (from 1 to 9). The board's squares need to be filled in with these digits in order to sum up to the specified numbers. You are not allowed to use the same digit more than once to obtain a given sum. Each Kakuro puzzle has an unique solution.



Congestion forms on the Bridge-Gate expressway

BRIDGE-GATES

Daniel Xu | Humorist

Bridge and Gates are both vitally important buildings on campus for freshman, providing the venues for both introductory physics and chemistry classes. However, the most direct route between the two, the Millikan Pond Bridge has been shut down to traffic creating a massive backup for Bridge-Gate expressway. The sudden and unannounced closure of the bridge caused

confusion among the Freshman class, possibly endangering their academic experience. Later, *The Tech* learned that the closure order was enacted by Kris Krispy, the political appointee in charge of the Millikan Pond Port Authority. The express reason for the closure was that the bridge was damaged earlier this year during the Me72 competition, but Caltech didn't have enough funding to fix it until recently.

However, allegations have emerged that the Caltech administration purposefully caused the traffic problems for a political purpose, a reprisal for the fact that the Freshman class refused to unequivocally support making the parking lot on Beckman lawn permanent. Caltech's bureaucrats, usually sequestered away in their offices, are said to have have looked out their windows overlooking the pond and found the perfect place to wreak havoc. A Federal investigation led by the Department of Education's Rapid Transportation Task Force is underway, but it will be a few weeks until the findings are released.

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