THE CALIFORNIA TECH



VOLUME CXIV NUMBER 14

Pasadena, California

February 17, 2011

This is a **Tech Brief** issue. next issue will come out: Monday, February 28, 2011. The Tech will continue to appear Mondays.



By Vishnu Manoranjan

CONTRIBUTING WRITER

By Amol Kamat

Sports Editor

On Monday, February 14th, the day that lovers and poets celebrate the bloody martyrdom of one Saint Valentine, the Caltech undergraduate community (actually, only half of them) called upon a select few to take up the mantle of public service in the 2011 ASCIT elections.

Thus dawned the new age where men appear as giants and giants as demigods. After an election rife with controversy, conspiracy theories, and tears, the Caltech undergrads find themselves with a fresh set of flagbearers; the old guards' influence nothing more than a distant sunset

In a hotly contested race, Chris Hallacy defeated Jordan Theriot by only eighteen votes to become ASCIT President. Those who did not vote looked on in dismay as the democratic process progressed without them: the cogs of fate turned and the complacent sat impotent.

Margaret Chiu won another hotly contested race for ARC Chair, defeating Shruti Mishra. It was hotly contested. Seriously, fire burnin' fire burnin' on the dance floor.

In still another hotly contested race, Laura Conwill defeated Christian Rivas and strode into the position of IHC Chair.Running unopposed in a hotly con-

tested race, Mario Zubia defeated NO and Abstain to become the new ASCIT Treasurer.

Diego Caporale was elected Director of Operations in a landslide, although the race could be described as hotly contested.

In an uncharacteristically close race, that was by no means hotly contested, Prakriti Gaba defeated Nina Budaeva to become the new social director.

Ploy Siriwon made like her name and hatched a fine plan, defeating Chris Kolner in the BOC Chair election (it was close).

Nikki Thadini and Kristen Holtz were elected BOC secretar-

Aarathi Minisandram won a hotly contested election for CRC CoChair; no doubt conducting her way to a win.

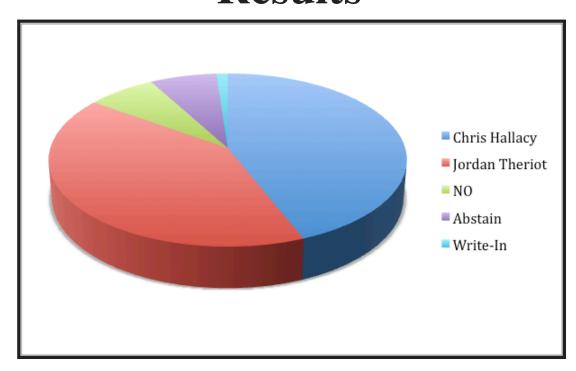
In perhaps the most important election of the night, Sandya Chandrasekaran, Jonathan Schor, Stanford, Jenny Yung, and Amol Kamat were elected Tech Editors, despite a strong showing for candidate NO. I voted for candidate

Overall, the 2011 ASCIT elections were hotly contested. Despite a weak voter turnout, the elections seemed successful.

We look to our new leaders for leadership and courage during these difficult times (I mean, it's Caltech).

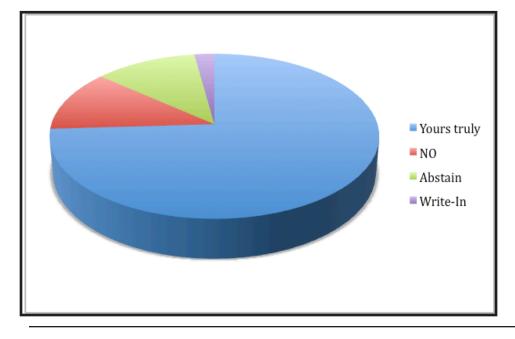
In related news, inside sources tell us that IBM is creating a computer to decide whether we should have a nineties band performance or a formal dance, so our problems are over.

ASCIT President Results



On February 14, the undergraduates of Caltech voted for their new set of governing bodies for the upcoming year. The percentage breakdown of votes in several categories was quite close, in one case coming down to a mere 18 votes. The presidential election was neck-to-neck; the race for Tech Editors, not so much. For hilarious election write-ins, check out humor.

Tech Editor Results



Prefrosh Weekend 2011 April 14 – 16, 2011

T-shirt Design Competition!!! Winning Prize: \$50!!!



Competition Guidelines:

- Font/graphics must be in one color ink only
- · Any combination of front & back design is allowed
- Prefrosh Weekend 2011 must be included in the design
- T-shirt designs must be appropriate for the occasion

Submit designs to your House Prefrosh Rep by February 25, 2011

Solar Decathalon fights location change Page 2

In This Issue

Proposal to go green in Catalina Page 2
Watson the robot beats Ken the man Page 3

Humorous ASCIT elections write-ins

Page 4

2 February 7, 2011 CPINION THE CALIFORNIA TECH

Secretary Chu should speak out on Decathlon

By Richard Wang

CONTRIBUTING WRITER

Secretary of Energy Steven Chu is, in the minds of many Caltech students, truly a hero. Not only has he won the Nobel Prize in Physics (which naturally gives him street cred around Caltech), but he is also one of the most influential and powerful scientists in the world. His thoughts on the country's most pressing scientific issues directly dictate national policy, and his strong support for alternative energy has directly benefited both Caltech and the nation at large. He is to science what Elon Musk is to engineering.

However, he has stayed silent recently, despite the Department of Interior's decision to revoke the Solar Decathlon's permit for the National Mall, ostensibly to preserve the integrity of the Mall (never mind the National Book Festival, which has replaced the Solar Decathlon on the Mall). This implicit support for the DoI's ruling goes directly against Obama's strong commitment to clean energy in his State of the Union, and it is a sad example of politics trumping sound policy.

Caltech students have had the incredible fortune of participating in the Solar Decathlon, a biannual

competition historically held on the National Mall that challenges students from twenty university teams around the world to design and build the most energyefficient and cost-effective home. The location of the competition on the National Mall has given the event prominence and publicity in a way few other locations can do.

So why is changing the location from the National Mall to the National Harbor such a travesty? Here are some suggestions:

- 1) Promoting sustainability is one of the top priorities of the nation, and there are few ways to reach out to the public more effectively than hosting the Solar Decathlon on the Mall.
- 2) The Solar Decathlon only occupies a tiny portion of the total area being renovated by the DoI in D.C.
- 3) All teams are contractually obligated to restore the Mall to its original condition after the end of the competition.
- 4) The change was only made after the DoI had issued a permit for the site and the DoE had confirmed the finalized location of the competition.
- 5) Such a drastic change late in the competition epitomizes

unprofessionalism, as it disrupts team efforts to reach out to potential sponsors and the public.

6) There has been no transparency or discussion regarding the decision, and no opportunity for teams to debate or question the issue.

However, the site change has been positive in one regard: this onerous decision has united the twenty teams of the Decathlon in opposition to the DoE's handling of the issue.

The effort to reinstate the competition on the National Mall has been spearheaded by Elisabeth Neigert, our team's communications manager and a student at the Southern California Institute of Architecture. With her leadership, the Decathlon teams have reached out to Senators and Congresspeople across the nation, and our efforts are already being noticed.

Fourteen Senators and more than ten Congresspeople have signed on to letters to Secretary of the Interior Ken Salazar opposing the site change and supporting reinstatement of the competition to the National Mall. A variety of trade groups representing the clean energy, architecture, and homebuilding industries have also

voiced their support for keeping the competition on the Mall. Our outreach efforts, through both social media and traditional media, have reached a wide audience, and the effort has been covered favorably by media sources ranging from the Washington Post to USA Today.

We believe our voices are being heard. The final announcement of

the site change has been pushed back repeatedly, likely because of the pressure that students from around the country have put on the DoE and the Congress-Edward man Markey, who is the ranking member of the Committee on Natural Resources, spearheaded our Congressional support; his influence over the DoI's funding has undoubtedly been effective in making them reconsider this site Hard as it may be to believe, our democracy may actually be working.

Ultimately, it is up to Secretaries Chu and Salazar to make the right choice to reinstate the Solar Decathlon on the National Mall. I only hope that the Obama administration will be responsive to our pleas and decide to do what is right rather than what is easy.



-courtesy of http://www.lanl.gov/

The California Tech

Caltech 40-58, Pasadena, CA 91125 advertising e-mail: business@caltech.edu editorial e-mail: tech@caltech.edu

> Editors-in-Chief Jonathan Schor Stanford Schor

News Editor Sandhya Chandrasekaran

> Sports Editor Amol Kamat

Business Manager Jenny Yung

Staff
Sadaf Amouzegar

Deboki Chakravarti Yang Hu Casey Jao Stone Jiang Rebecca Lawler Monorina Mukhopadhyay Joel Nikolaus Pradeep Ramesh Neha Samdaria Julia Su Gloria Tran James Wu Vivian Yang Wesley Yu Jenny Yung Chris Zheng

> Circulation Arjun Ravikumar Advisor

Advisor Tom Mannion

The Tech is published weekly except during vacation and examination periods by the Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors and advertisers.

Letters and submissions are welcome; e-

Letters and submissions are welcome; e-mail submissions to tech@caltech.edu as plain-text attachments, including the author's name, by Friday of the week before publication. The Tech does accept anonymous contributions. The editors reserve the right to edit and abridge all submissions for any reason. All written work remains property of its author.

The advertising deadline is 5 PM Friday; all advertising should be submitted electronically or as camera-ready art, but *The Tech* can also do simple typesetting and arrangement. All advertising inquiries should be directed to the business manager at *business@caltech.edu*. For subscription information, please send mail to "Subscriptions."

Catalina apartments should go green

By Alex Pai

CONTRIBUTING WRITER

Everyone knows recycling is awesome (right???).

Everyone knows that getting paid to conserve (CRV, Cash for Clunkers, etc.) is more awesome.

And if one is paid to conserve without the annoyances of filling out rebate forms or dropping off cans at the grocery store, well, that is even more awesome.

A step in that direction would be the replacement of the singlepaned windows with doublepaned windows in Catalina apartments (graduate housing).

The energy savings would more than pay for installation costs. A fringe benefit of installation would be a reduction of noise.

I prematurely wake up to the unbearable

clanking of garbage/recycling trucks on a biweekly basis.

Even more annoying is the loud clamor of party music from the recreational rooms, especially when not invited to such events.

Bankrolling

The average two-bedroom apartment in our locale spends approximately \$70 per month (for two students) on heating and cooling.

Assuming a typical 10-15% savings in efficiency of switching to double pane windows, each apartment would save approximately \$120 a year in heating and cooling.

The average installation cost for three windows in a two-bed-room apartment is around \$900 dollars.

Financing the installation material costs for the new windows should not place a burden on the finances of the remainder of the university.

The funds used to finance installation could be obtained by a bond offering. Caltech maintains an AAA Credit rating from Moody's.

Additionally, any interest accrued from bonds offered by Caltech is tax-exempt. Therefore, an offering of 5% is very market competitive.

...the positive externalities of

environmental responsibility

and noise reduction may just

be enough to tip the balance."

In 2002, Caltech paid the Cali-

fornia Educational Facilities Au-

thority between 4.25-5% interest

on loans for various construc-

tion projects including parking

structures, energy conservation

projects, and the expansion of

Caltech's turbine and heat recov-

What about the opportunity

The opportunity cost for stu-

dents can be curtailed considering

students do not reside for a typi-

Since students graduate in May

and new students only arrive in

September, there is a period of

under-capacity at the Catalina

Apartments. Installations should

coincide with these months to

ery cogeneration system.

cal yearlong schedule.

costs of window installation?

ensure there is no intrusive construction.

Assuming a 20 year, 5% bond offering for the installation, the monthly cost is \$6 per month, per apartment in 2011 dollars.

The total energy savings per

year would average \$10 per month.

However, discounts can be negotiated for multiple installations, furthering the cost savings.

for the windows obtain the outfitted apartments.

Four dollars of energy savings per month per apartment may not amount to much. Simple expenditures such as administrative costs may eat into this savings. However, even if costs were a ballpark of savings, the positive externalities of environmental responsibility and noise reduction may just be enough to tip the balance.

Try before you buy

Obviously, an untested replacement of every Catalina apartment window could open

the university to large potential liabilities.

Suppose energy efficiencies of the new windows do not compare to rated efficiencies. Could there be other attributes of the windows which are unforeseen, e.g. design

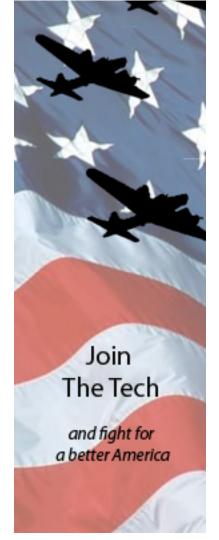
flaws, resistance to burglary, or installation issues?

To address this, a pilot program of a few apartments would be more reasonable.

Incoming students can optin to the pilot program depending on their own typical temperature controlling needs versus energy efficiency surcharge and their evaluation of noise reduction.

The surcharge would range anywhere from \$6 (the cost of installation) to \$10 (the cost of average savings) per month depending on the financial or benevolence of the graduate housing administration.

This would ensure that students with the greatest need



FEATURE

The Company Men shows life of wealthy

By Faith Manary

CONTRIBUTING WRITER

As a senior, I see a lot of friends thinking about jobs, worrying about jobs, and both succeeding and failing at getting jobs. It seems like maybe it's just part of our endless slog of a transition into adulthood, but a quick glance around the country (or even just around Caltech) makes it clear that many, many Americans are worried about their jobs.

"The Company Men" is a film that explores these issues, but from a strange and unexpected angle. Unlike last winter's hit "Up in the Air," it doesn't deal with Joe-Average working class fellows getting laid off – it is a film about hideously rich corporate scumsuckers getting laid off. It's a strange subject for a film, and the movie never really commits to an opinion about its characters. On the one hand, they're filthy rich, and it's hard to imagine that they got it all from being really amazing people or that they're giving it all away to charity. On the other hand, they are people who are realizing that their entire life is falling apart. It's hard to

feel any sorrow for them, and yet the characters plead for the audience's sympathy.

There's a voyeuristic fun to watching "how the other point-oh-one-percent lives," and some of the pleasure of the movie comes from watching how much they freak out about not being able to afford their country club membership anymore. But psychologically, the audience does hold some sympathy for them, because being fired isn't just about money – it's about shame. We watch the characters experience real shame for, one can assume, the first time. It is actually quite touching and watching them swallow their pride and stop being snobby is a compelling redemption story in its own right.

"The Company Men" is a little hard to swallow, and it's a little hard to connect with. But the team of really fabulous actors (Ben Affleck, Tommy Lee Jones, Chris Cooper, Kevin Costner) does a hell of a job trying to get us to understand that rich people are people too, and if you're okay with letting that be the premise of the film, there's some catharsis to be had here.

Watson trounces human competitors

By Sandhya Chandrasekaran

News Editor

Stanford Schor

Co-Editor in Chief

While we all know Watson as Sherlock Holmes' faithful sidekick, there's a new Watson in town: better, faster, stronger.

And this Watson isn't decoding crimes and mysteries – rather, Watson is swiftly crushing opponents on the family trivia game show Jeopardy.

Who is the elusive Watson, you ask? More like what.

Watson is an IBM supercomputer, the world's most advanced question-answering system.

Over a three-day run on Jeopardy, this supercomputer managed to rake up \$77,147 by beating out its competition: former champions Ken Jennings and Brad Rutter (mere humans), making nearly twice their combined earnings.

IBM researchers spent four years building this machine, which is capable of processing 80 trillion operation per second. In computer jargon, it runs about 2800 processor cores and had 16 terabytes of working memory. The Watson project took IBM's previous work on a chess-playing supercomputer, to a whole new level, because of the levels of ambiguity implicit in the problem it was trying to tackle.

Jeopardy host Alex Trebek admitted to a little fear of this robot genius, telling the IBM masterminds,

will serve as a guide to doctors to more accurate diagnoses and better treatment decisions by providing more data sources. In fact, Nuance expects to release its first Watson products within two years. Watson is no sidekick. He

"...there's a new Watson in town: better, faster, stronger...swiftly crushing opponents... "

"Guys, I think it's only five years away before you can come up with a computer who can host Jeopardy."

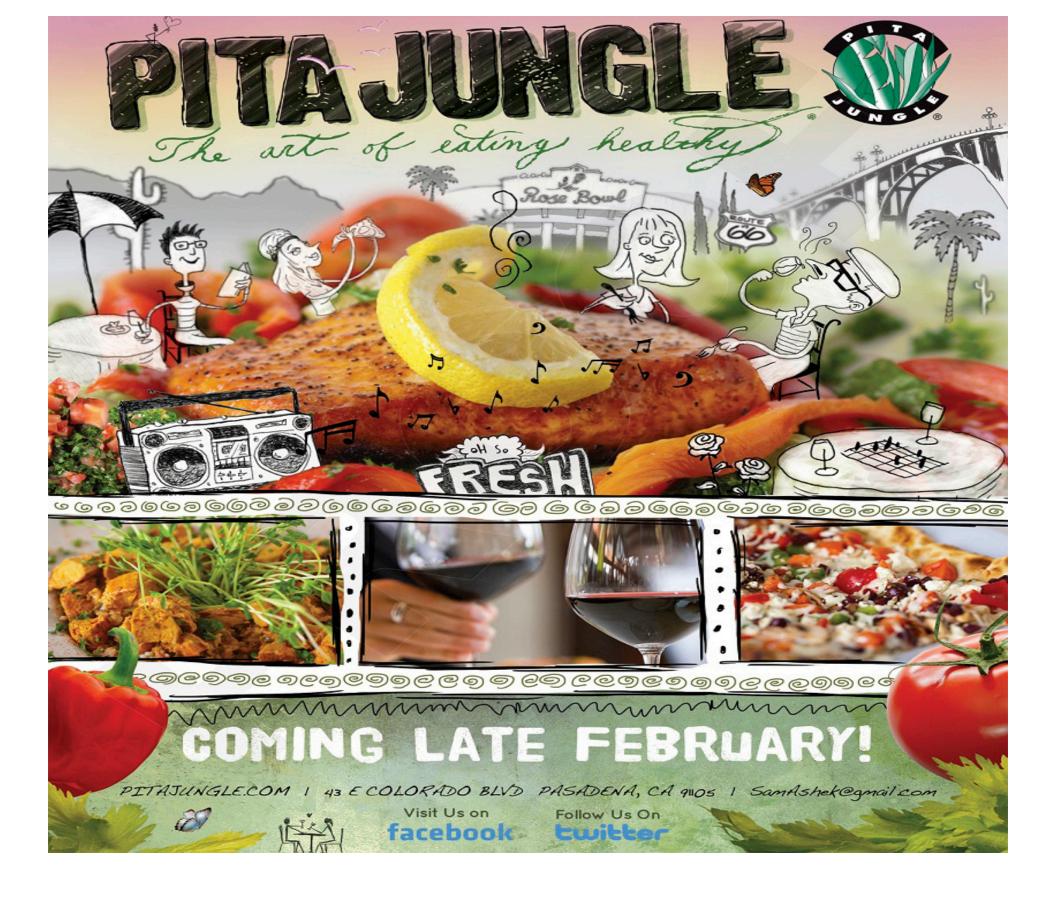
Honestly, Trebek, why would Watson stop there? IBM and Nuance, a speech recognition products vendor announced a five-year research agreement to "explore, develop and commercialize IBM's Watson computing system's advanced analytics capabilities for use in healthcare.

It is rumored that the two companies plan to combine Watson's technology with Nuance's speech recognition and clinical language understanding capabilities to create a "physician assistant" that is the real deal, and will most definitely be the one doing all the kicking.

From February 15th to February 17th Watson faced off against some of the most reknowned figures in the history of Jeopardy.

Ken Jennings, who won the most consecutive Jeopardy games (74) and won \$3,172,700 stood alongside Brad Rutter, the biggest all-time money winner with \$3,255,102 in the ultimate man versus machine showdown.

The end of the three-day tournament saw Watson with an enormous lead: \$77,000 to \$24,000 for Ken and \$21,600 for Brad. Time to prepare for a robot takeover.



CALTECH'S VERSION OF THE ONION SAYS...

Houses and Avery Declare 24 Items RF-able

By Mary Nguyen

NOT A STAFF WRITER

OLIVE WALK - After the theft of the Fleming House Flag, other houses have sought to protect their own possessions, some more abstract than others, from thieving pranksters.

All of the attention given to the theft in the worldwide press and by the IHC has convinced the Houses, Hovses, and Avery that declaring their semi-expensive, replaceable items are non-RFable has its benefits.

Under current IHC rules, making an item non-RF-able places restrictions on what pranksters can do to it.

Stealing such objects is now as big of a deal as pranking Blacker's 260-year-old tapestry and Fleming's cannon.

"Fleming had three out of the five non-RF-able items: a cannon, flag, and hand bell. Now that every house has three non-RF-able items, the list is much fairer," said a Rudd.

Before the additions, Blacker's tapestry and Lloyd's Portrait were also on the list.

Under the amended pranking rules, each house declared three items as non-RF-able.

As a result, Fleming's live cannon, wall-sized flag, and small hand bell; Ricketts' wooden pentagram, absent firepot, and bombarded "Biohazard" dining hall mural; Ruddock's Mike the Mannequin, non-descript black couch, and most important OPI oak plank; Dabney's communal hot tub, colorful ball pit, and invisible air kazoo; Page's lost James R. Page painting, president, and Solo red cups; Lloyd's portrait of Ralph B. Lloyd, formal dinner mini gong, and well-used book "The Guide to Getting It On"; Blacker's antique tapestry, hodgepodge tool set, and melting ice blocks; and Avery's entire building complex, odorous hallway shoes, and name for its members have all been listed as non-RF-able.

"This is a good amendment," said an Averite. "If someone from another house takes the shoes I

left in the hallway for an annual 'tradition' or something, and I don't feel like walking to get the shoes back from them later, I can just have the IHC or CRC deal with it."

The Averite happily concluded, "I can have even fewer interactions with people!"

"Now that every house has their own set of non-RF-able items, people will be less likely to take our things," said a Flem. "Hopefully, any honor-code-violating thief will steal the other stuff on the list instead."

However, despite the reported fairness and benefits of allowing each house three non-RF-able items, there have been complaints.

For example, despite being declared non-RF-able, some items like Page's portrait are still or have become missing.

"Where is justice?" said a Darb.

"Why does no one care about our missing air kazoo? I haven't seen anything about that on the front page of The Tech. Is Fleming favored above the other houses? In fact, what about the Skurves' firepot? Hasn't that disappeared, too?"

"Having ridiculous items on the list is just asking for it," said a Lloydie.

"It also seems like an honor code violation against incoming students to declare absurd things non-RF-able.

Pranking is actively used as a marketing tool. It's being kind of dishonest to prefrosh, who can still go elsewhere."

Then, the Lloydie paused. "Unless...oh my God! Has Caltech punk'd us? The show is supposed to come back, and I remember signing a waiver before going to frosh camp."

A Mole posited this objec-

"I feel that having several random items on the list reduces the value of the 1750 tapestry and Fleming cannon. Those should actually be non-RF-able. I think non-RF status should be saved for very expensive and in the case of the Fleming cannon, danger-

ous items. Even then, dangerous items should still be RF-able to people who know what they're doing. Use the honor code," said the Mole.

"Actually, in general, a great policy would be to use the honor code for anything administration might think is dangerous, but my friends and I don't. It's not like we'll damage anything. It's not a prank anymore if we do that," continued the Mole.

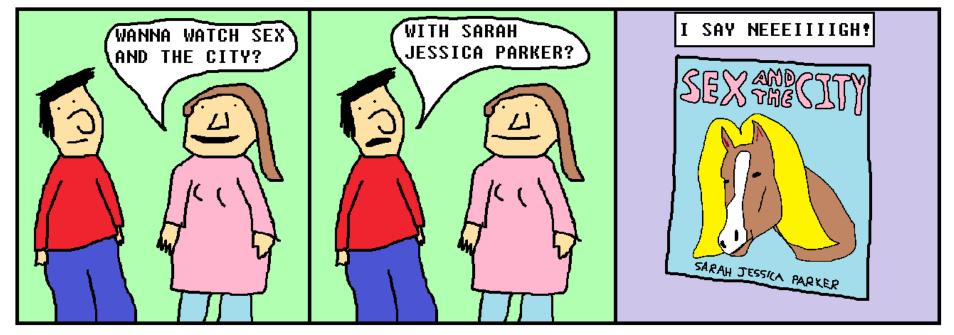
However, while they may disagree on the value of the new non-RF list, both sides tended to somewhat agree on whether momentary stealing counts as pranking

"If your temporary theft is so epic you can claim responsibility for it on national television, then it's a real prank," said a Skurve, a member of Ricketts.

"If not, you're just doing it to p--- them off or f--- with them, which, if you have a decent reason, is fine, too."

Mary Nguyen reported from the Olive Walk.

MOVIE TIME BY DAVID GINOLA



Selected write-in candidates from ASCIT elections

ASCIT President	IHC Chair	Treasurer	Social Director
* Brock Jones	* Pita Jungle	* Fake Sean	* Nickelback
* Fake Shawn's Bike	* Darth Vader	* Brock Jones	* OMFG NO!
* Thomas the Tank Engine	* Brock Jones	* Fake Xuan's Bike	* WAT IS A SOCIAL?!

Director of Operations

* NO!

* NO!!

years

* Merlob four more

BOC Chair

* Is a sound bit and eighth of a sound bite?

Tech Editors

- * Zarathustra Brady
- * JON-STAN!!!!!!
- * David Ginola

The California Tech

Caltech 40-58 Pasadena, CA 91125