tech.mit.edu

Volume 135, Number 34



WEATHER, p. 5

THU: 50° F | 38° F

Partly cloudy

FRI: 48° F | 32° F

Clear

SAT: 50° F | 32° F

Clear

Thursday, December 3, 2015

Course 6 employs survey to measure student workloads

Shared course calendar led 6.046 to move exam from packed week

By Ray Wang
ASSOCIATE NEWS EDITOR

Part of a larger institutional response to student feedback, MIT's Department of Electrical Engineering and Computer Science has been collecting data on its students' workloads since last spring. And the results are starting to take effect be-

hind the scenes.

Professor Rob Miller created a tool to show all main assignments and exams for major Course 6 classes. Instructors, after entering their class info, can check for week-to-week conflicts with other classes. After consulting the tool, Professor

Shafi Goldwasser shifted a five-day takehome midterm in 6.046 to another week. Professor Daniel Jackson, who teaches 6.170 Software Studio, cancelled a pset for his class.

A few weeks ago, Goldwasser presented some of the visualizations that have come out of the data — among them, a week-byweek graphic of the average amount of time students are spending on courses, a visualization of the most work-heavy weeks, and a ranking of courses by how much they deviate from their advertised workload.

The data come from weekly sur-

Survey, Page 2



JORGE VALDEZ

Swinging piñatas fly around Lobby 7 early Wednesday morning. The hack, organized by MITMex, was made to share the Mexican tradition of breaking star-shaped piñatas during Christmastime.

MIT senior Vo Tien Phong receives a 2016 Marshall Scholarship

Vo Tien Phong '16 will spend next year studying physics at Cambridge University as a recipient of the Marshall Scholarship.

The Marshall Scholarship is awarded to up to 40 students annually and funds graduate education at a university in the UK. This year's recipients were announced Monday.

Vo, who is double-majoring in physics and mathematics at MIT, will pursue an MPhil in physics at Cambridge, and plans to return to the U.S. to complete a physics PhD.

Ultimately, Vo aims to become a professor of theoretical physics. At MIT, he has taught for the Education Studies Program, and is currently a TA for 8.012 with the freshman learning community Experimental Study Group.

Vo's research interests include theoretical condensed matter physics, a branch of physics that seeks to understand micro- and macroscopic properties of matter, such as the electronic properties of solids, or high-temperature superconductivity.

His current research uses

quantum mechanical calculations to study electron flows.

Vo was born in Vietnam and currently lives in Pennsylvania. He entered MIT as a Gates Millennium Scholar.

"I am honored to be given the opportunity to join this distinctive community," Vo told the MIT news office. "The collective energy of this distinguished group of scholars dedicated to knowledge, justice, and humanity will broaden my perspective of the world and our place within it."

—Katherine Nazemi

Dance Troupe p. 10–11

'Unprecedented' rise in violations prompts police note on scooters, skateboards indoors

The fall semester has seen "an unprecedented increase" in the number of people riding scooters or other "wheeled devices" to get around inside buildings on campus, according to MIT Police.

The trend prompted an email reminder Tuesday from Cheryl Vossmer, administrative captain at MIT Police, that all forms of wheeled transportation are banned indoors and in parking garages — with the exception of medical mobile equipment like wheelchairs and certain scooters.

Many students get to class by bicycle, skateboard, or scooter. Occasionally people can be spotted riding Segways and other motored personal vehicles on campus.

The email said that violations of the policy were especially common in the basements of academic buildings, and that viola-

tors would be fined \$25.

It was not immediately clear whether "chairing," the student pastime of rolling down inclined basement corridors on swivel chairs, would also be penalized.

The message from Vossmer also took the opportunity to remind cyclists that they would have to pay a \$50 fine to retrieve bicycles removed by MIT Parking and Transportation for being "illegally parked or attached to stairwells, handrails, HP Ramps, light posts or fire chains."

"A lack of knowledge will not be accepted as grounds for dismissal of citations or enforcement actions," the MIT Police warned. "It is the responsibility of all individuals operating bicycles and non-pedestrian devices on campus to make themselves familiar with MIT regulations."

—Gabriella Studt

IN SHORT

Give your feedback: online subject evaluation forms (http://web.mit.edu/subjectevaluation) are open until Monday, Dec. 14 at 9 a.m.

Registration for IAP PE classes has opened. Sign up by Wednesday, Dec. 9 at 1 p.m. and get those credits!

This year's Trashion Show, hosted by the UA Sustainability Committee, will be held Friday, Dec. 4 from 7:30 to 10 p.m. in Lobdell.

Pre-registration for IAP classes has opened on Websis. Make sure to register by Wednesday, Dec. 30 at 5 p.m.

Subject listings for Spring 2016 are now available! The deadline to initiate pre-registration for spring classes is Wednesday, Dec. 30 at 5 p.m. Once submitted, you may modify your subject selections until Friday, Jan. 15 at 5 p.m.

Send news and tips to news@ tech.mit.edu.

PRIVACY WITHOUT BORDERS?

Should Facebook be allowed to store personal data overseas?

OPINION, p. 4

HOW I DITCHED MY PHONE

And didn't get another. OPINION, p. 5

DRUGS AND MISINFORMATION

Chancellor Barnhart's email should have paid more attention to the facts. **OPINION**, p. 5



DOCUMENTING MY COOKING MISSTEPS

How I started a food blog. **CAMPUS LIFE, p. 7**

MY SECRET NAPPING SPOT

I'm not telling anyone.

Just writing about it in a newspaper.

CAMPUS LIFE, p. 7

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STARR FORUM

Religion & Violence

FEATURING



J. Bryan Hehir is the Parker Gilbert Montgomery Professor of the Practice of Religion and Public Life. He is also the Secretary for Health Care and Social Services in the Archdiocese of Boston. His research and writing focus on ethics and foreign policy and the role of religion in world politics and in American society.



Haroon Moghul is a fellow at the Institute for Social Policy and Understanding and a Ph.D. candidate at Columbia University. He is a senior correspondent at Religion Dispatches and columnist at The Muslim Observer. Moghul has spoken widely on Islamic history and culture, contemporary politics in the Muslim world, and radicalism and religious identity.



Stephen Van Evera is Ford International Professor in the MIT Political Science Department. Van Evera works in several areas of international relations: the causes and prevention of war, U.S. foreign policy, U.S. security policy, U.S. intervention in the Third World, international relations of the Middle East, and international relations theory.

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Despite response rate, survey helps profs make tweaks

Course 6 calendar of assignments helps avoid colliding hell weeks

Survey, from Page 1

veys that have been sent out to Course 6 students.

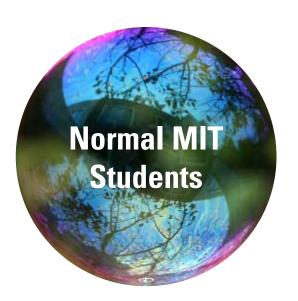
For each class, students are asked how many hours they've spent that week studying, psetting, working on projects, or taking exams. They're also asked whether they think the work is too stressful, too excessive, unevenly distributed, or causing conflicts with other classes

Sometimes, it takes a little bit of humor to get students to respond. Goldwasser, who signs each of the emails, once wrote, "All that is necessary for the triumph of evil is for good men and women to not fill out surveys." Still, roughly 20 percent of students respond each week, according to Goldwasser.

Anantha Chandrakasan, the head of the EECS department, is hopeful about the potential of these changes. "Faculty are eager to support this initiative and committed to improving the student experience," he said.

It's likely that the ideas that Course 6 is testing will expand to more of the Institute, possibly resulting in interdepartmental coordination.

Do you live *outside* the bubble?



Tell us your story



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The Tech (ISSN 0148-9607) is published on Thursdays during the academic year (except during MIT vacations) and monthly during the summer by The Tech, Room W20-483, 84 Massachusetts Avenue, Cambridge, Mass. 02139. Subscriptions are \$50.00 per year (third class). POSTMASTER: Please send all address changes to our mailing address: The Tech, P.O. Box 397029, Cambridge, Mass. 02139-7029. TELEPHONE: Editorial: (617) 253-1541. Business: (617) 258-824. Facsimile: (617) 258-8226. Advertising, subscription, and typesetting rates available. Entire contents © 2015 The Tech. Printed by Turley Publications, Inc.

A gathering storm in the cloud

The US and Europe need a framework for regulating personal data stored overseas

By Keertan Kini

STAFF COLUMNIST

The United States and the nations of the European Union don't see eye to eye on many topics: the more interesting version of football, the appropriate minimum age of alcohol consumption, and the use of international military force being among them. Yet for several years, one such conflict — on data protection — has grown from a divide into a gulf, and just about two months ago, the bridge connecting the two collapsed.

On Oct. 6, the European Court of Justice (ECJ) struck down the Safe Harbor agreement that governed the transfer of European citizens' data to the U.S. This provision protected thousands of U.S. technology companies from litigation when operating in Europe, so long as they complied with the provisions in the agreement. Upon its invalidation, all such companies relying on cloud-based storage for their services might now violate European data protection laws. Each member state's Data Protection Agency (DPA) can now exercise its own authority on the services offered to its citizens. As can be imagined, members of the many affected technology firms and the whole industry wait with bated breath for the ruling to be clarified and for guidance.

Yet the fall of the Safe Harbor agreement was not entirely unforeseen. The Safe Harbor Framework was not codified in a treaty but was crafted by the U.S. Department of Commerce and the European Commission (the executive body of the EU). It was created in 2000, still in the rela-

tively early years of broad Internet adoption, when just over 400 million people were on the Internet. Today, that figure is over 3.2 hillion

The agreement relied in part upon clarifications of privacy principles detailed in the Frequently Asked Questions section of some of the communications between the European Commission and the Commerce Department. Thus the agreement was reminiscent of an official contract scrawled on the back of a napkin: legally binding but uncomfortable.

The ECJ struck down the agreement because it prioritized "national security, public interest, or law enforcement" above the EU's privacy principles. Unlike the U.S. Constitution, the EU Charter of Fundamental Rights specifically details privacy and data protection as fundamental rights.

As a result, tech companies currently have four general options. First, they can stop using the cloud and therefore no longer transfer data across the Atlantic, though this option is quite unlikely. Second, companies can ignore the issue and hope that a new agreement will be reached. Third, companies could anonymize all sensitive private information before storing it in the cloud, which may end up breaking the ever-increasing number of services that require identifiable information to function. Lastly, major cloud providers can offer options to store non-anonymized data solely within the borders of the nations of each citizen, which imposes technical costs in implementation, physical costs in new data centers, and legal costs in ensuring that the resulting system actually complies with all the subsequent data protection regulations.

As can be imagined, most companies seem to have chosen the second option: waiting for the dust to settle. Yet given that any new agreement requires consensus among the U.S. Commerce Department, European Commission, and all 28 national DPAs, that wait may be extensive. In the long term, however, the fact that these negotiations will stretch on may end up being a boon.

All of the legal factors and business interests arising from the ECJ decision mask a deeper truth: this issue is not merely legal, but also cultural. While sentiment may vary between different member states, it is telling that Google, a poster child for massive data analysis of its users, is referred to in Germany as the disapproving moniker datenkraken after the legendary sea monster. Whether or not a Safe Harbor 2.0 is implemented soon, the different paths that Europe and the U.S. walk with regard to privacy and data protection are not likely to intersect soon. Therefore, regardless of what legal remedies are used to calm the panic felt by the technology industry, a long-term vision is required. In particular, policymakers should build a flexible framework for future bridges across cultural and legal differences in this area, not meager palliatives for the present.

So we must ensure that the final agreement is not only a set of provisions, but also a schema that will allow evolution alongside cultural views of privacy and data protection. Otherwise, in 15 years, another storm in the cloud may gather.



OPINION POLICY

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THURSDAY, DECEMBER 3, 2015 THE TECH 5

WEATHER

High pressure to dominate end-of-week weather

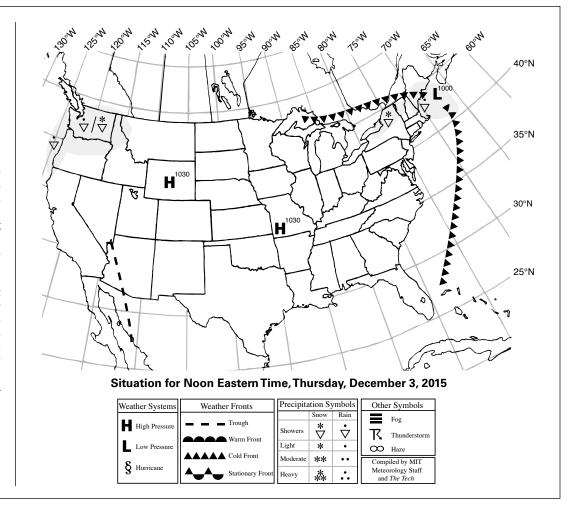
By Colin Thackray STAFF METEOROLOGIST

After the recent passing of a low pressure system, high pressure over the eastern U.S. will dominate the weather through the end of the weekend, leading to clear skies and similar temperatures each day. Lows each night will dip down to around freezing under the clear skies. Daily highs will be in the low-to-mid 50s (°F). The relatively dry air will be a change of pace from the weather of this past week. Early next week, the chance for another low pressure system returns.

In Paris, this week and next, the 21st annual Conference of Parties (COP21) for the Rio Convention is taking place. At this meeting, leaders and delegates representing the nations of the world are meeting to review the United Nations Framework Convention on Climate Change (UNFCCC), a framework for global action to combat dangerous climate change. The aim of the climate negotiations is to achieve a legally binding and universal agreement, in order to keep global average temperature from increasing more than 2 °C.

Extended Forecast

Today: High of 50°F. Partly cloudy. Winds W 15-20mph. Tonight: Low of 38°F. Partly cloudy. Winds W 15mph. Tomorrow: High of 48°F, low of 32°F. Clear. Winds W 10mph. **Saturday**: High 50°F, low of 32°F. Clear. Winds W 5-10mph. Sunday: High of 55°F, low of 32°F. Clear. Winds W 5-10mph.



How eliminating the smartphone has simplified my life

Maybe you should try it, too

By Feras Saad STAFF COLUMNIST

The smartphone has become an essential technology for many of us nowadays. Three years ago, I wrote an ominous article in The *Tech* about the worrisome dominance these devices have over their owners, and in 2015 the effect is more prominent than ever. At an outing this summer, I was caught sneakily using my phone under the dinner table and not paying full attention to the speaker, at which point I was subtly called out by a friend who remembered that opinion piece. The point was spot-on, illustrating my own downfall to the little device. The decision was made: the phone had to go.

Even transitioning from minimal use, going phoneless brought to my attention the various regimes in which my dependence had been much too high. Eliminating these dependencies has significantly improved the quality of my daily life.

Let us start with sleep. Rather than wake up frustrated and angry at the phone alarm blaring uncontrollably (which for years I placed across the room to force myself to get out of bed), I now wake up by keeping my window and blinds open. There is a certain charm to waking up naturally to a fresh morning breeze and gradually rising sun. On days when it is cloudy, I am saved by the playful chirping of two little birds that have taken my sociable open-blinds gesture to heart and established a home on my

Long gone are the painful eyestrains and headaches that result from intensely staring and prodding at a tiny six-inch screen which, recent studies suggest, most Americans do for an outrageous five hours per day. I have won back every second of those five hours. Time working on readings, psets, or research is dedicated entirely to the activities at hand, rather than interrupted by meaningless notifications emanating from a sassy phone that cries for attention.

In lecture, it is much easier to concentrate from start to finish rather than to fall into the trap of Googling some confusing technical topic, going off on a massive Wikipedia tangent, and then completely losing track of what the instructor was talking about in the first place. Even exercising at the gym is more productive and enjoyable. Rather than artificially boosting my energy with loud, angry music screaming into my head, I can now engage in highly effective workouts by focusing solely on the metal and heart rhythms.

On another note, there is a certain solace in keeping my geographic whereabouts and other information my own business, rather than that of a hot-shot "data scientist" somewhere in Silicon Valley whose life goal is to spam smartphone users with noise and advertisements based on their data. And I have rediscovered the fun of mentally backtracking tidbits or trivia that come up in conversation but I cannot quite remember. Is thinking for a few moments a risk so great that we must be ready to consult the smartphone for an immediate answer, right now and always?

Perhaps the most worrying observation from this whole experiment has been the reaction of some people who learn of my phoneless status. Some respond with strong terms such as "insane" and "unbelievable," saying they could "never do such a thing," as though their phones are as critical as the air they breathe. Others interpret the gesture as an offense or a declaration of superiority to behaviors common in modern society.

I am not making any claims that smartphones are entirely useless devices, even though I learned that was the case for me. Nor am I encouraging anyone to do away with their own devices altogether. However, it might be worthwhile to think about your relationship with the pesky little phone. You may find that small changes in habit can reduce a good deal of nonsense and noise from vour life.

GUEST COLUMN

Alcohol abuse, illegal drugs, and misinformation *Email reveals continued assumptions and inaccuracies behind MIT's substance policies*

By Hairuo Guo

Earlier this week, members of the MIT community found in their inboxes an email from Chancellor Barnhart. Immediately beneath the ominous subject line of "Alcohol abuse, illegal drugs and our community" were the expected exhortations against binge drinking and drug use. This time, however, these words came backed by evidence. To quote the email, "The results of the 2015 Healthy Minds Study and 2014 Community Attitudes on Sexual Assault survey show the direct — and negative — links between substance abuse and student health and safety." Included helpfully were also hyperlinks to these two studies, as well as one to the MIT "Statement on Drug-free Campus and Workplace Policies," which contains, among other things, a list of "selected drugs and their effects." In short, a bevy of material to support a seemingly obvious claim.

The problem? Within all that material, the data supporting the conclusions Chancellor Barnhart refers to simply isn't there. Neither of the reports find any sort of causal relationship between substance use and student safety, negative or otherwise. The 2015 Healthy Minds Study did ask respondents about binge drinking, cannabis use, and use of cigarettes in addition to questions pertaining to mental health. But if a correlation was established, it isn't presented in the final report; all that is given are graphics comparing percentages of occurrence for MIT students to those in the nation.

Her words are more tenable with regard to the 2014 Community Attitudes on Sexual Assault — but only with dangerous implications. There is a single statistic in that report that seeks to represent instances of student victims who were sexually assaulted while drunk, high, asleep, or otherwise incapacitated (44 percent out of all victims). While that is a disturbingly high percentage, it is of being incapacitated, conditional on being victimized, not the other way around. It has no real correlative value, especially considering that being incapacitated is distinct from alcohol abuse or drug use. To say that this statistic shows the "[direct and negative link] between substance abuse and student health and safety" is to spin a story far removed from what the published numbers say. Even worse, it seems to shunt blame onto the victims, implying that their victimization would not have happened had they not put themselves in a precarious position.

Regardless of whether you agree with the claim, it is, in the context of the data provided, a glaring misrepresentation.

Regardless of whether or not you agree with the stated claim, it is, in the context of the data that was provided, a glaring misrepresentation. And it is not the only one. The list of "selected drugs and their effects" found in the hyperlinked statement (which itself is part of the Mind and Hand Book) is laughably bad, chock-full of errors, and apparently copied from the website of a small for-profit nursing school located in Virginia. Accusations of plagiarism aside, one would expect that an institute such as ours would compile a concise, accurate, and clearly organized list of proclaimed dangerous substances and their effects for the benefit of its students. Instead, we are given a reference that places PCP (an addictive anesthetic with dissociative qualities) in the same category as LSD (a non-addictive serotonergic psychedelic) while neglecting to mention other common psychedelics altogether. A former student on a particular mailing list summarized the accuracy of this source neatly by noting that it states that "GHB ... is made from gamma butyrolactone and sodium or potassium hydroxide, which means that it is essentially degreasing solvent ... mixed with drain cleaner." In the words of the student, the analogous assumption for table salt would be that "it is essentially nuclear breeder reactor coolant (sodium) combined with WWI poison gas (chlorine)."

While sodium and chlorine might not be a toxic combination, that of sensationalized misinformation and an incomplete Good Samaritan policy is. The unreasonable distinction between alcohol and other substances made in the Mind and Hand Book still stands. Although it is now promised that "MIT will treat [any illegal substance-related emergency] as a health and safety matter first and foremost," the threat of disciplinary action remains. Notably, students who "spot" (i.e., knowingly look after someone who has taken an illegal substance) are excluded from all protections offered. What results from this entire mess are students who are more likely to consume drugs in solitude, friends who are hesitant to offer supervision or even inquire too much, and potential Good Samaritans who are left to carefully balance the possibility of consequences against the chance of a false scare (heightened by inaccurate information) before seeking medical help.

Failing to give facts the weight that they are due will only alienate students, and we will notice.

Chancellor Barnhart's term in office has been characterized by her dedicated efforts to reach out to the student community and to understand its perspectives and struggles. It is without a doubt that this email was sent with the best intentions in mind. The shoddy quality of the information provided, however, is a reminder that there is still much to be done. Failing to give facts the weight that they are due will only alienate students, and we, being the fastidious, contentious, nit-picky bunch that we are, will notice. It is therefore heartening to hear that "the people of MIT have been thinking and talking openly about campus life issues," but let's remember that when either is done in the absence of facts, it is done in vain.

Hairuo Guo is a member of the Class of

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Rounding up recipes

How I started a food blog

By Elaine Lin

Recipes often call for a cup of a vegetable. Vegetables don't come in cups.

When I first started cooking for myself freshman fall, I didn't know which recipes to try. I didn't want to buy a vegetable, only use a fraction of it, and then throw the rest away. Rounding up to the nearest whole unit required extensive research: How many potatoes are in a cup? How many medium potatoes are in a pound? How big is a medium potato even?

Recipes also call for loads of spices. If I actually followed recipes for every dish I make, my cabinets would overflow with containers: apple pie spice and pumpkin pie spice, hot curry powder and mild curry powder, onion powder and onion flakes.

To avoid buying tons of ingredients and to use up the ones I already had on hand, I feverishly looked up how to modify recipes by scrolling through comment sections and scanning multiple sources. Unfortunately, research took a while for each new recipe I tried.

Tired of having to constantly look up recipes, I decided to start a food blog, FoodParsed, so that I could keep track of the recipes I use and offer more flexibility with the ingredients.

It took me a while to learn which modifications would be OK. Rounding to the nearest cup of flour results in cookie rocks. Rounding to the nearest potato makes it so much easier to buy groceries and make a dish

In the process of experimenting, I messed up quite a few dishes; I once forgot to add oil to chocolate cake, and I undercooked potatoes for African peanut stew. Fortunately, the results were still fairly

tasty, so I fed them to my floormates who never turn down free food. Unlike most food bloggers, I always include these sad anecdotes of rubbery cakes and crunchy raw potatoes for entertainment and

I hope that through sharing these stories I can help people become better cooks. My favorite thing about blogging, though?

Hearing back from my readers. The first time somebody left a nice comment on my blog, I told all of my friends and started jumping up and down my hall.

However, don't get me wrong. I don't have nearly enough readers to make a profit: my blog made two dollars of ad revenue in the month of October. I paid far more than that for hosting and a blog theme, but

the freedom to write content and the joy of blogging are priceless.

Even if my blog never becomes mega popular, I have already paid blog hosting for three years, so you can rest assured that I'll be sticking with this venture and rounding up recipes for years to come.

Elaine Lin is a member of the Class of



ILLUSTRATION BY JESSIE WANG

THE FIRST YEAR

When sleep doesn't come readily

The search for an ideal place to nap on MIT's campus

By Michal Shlapentokh-Rothman

Watery eyes. Constant yawning. Nodding off in class. These are common side effects of not getting enough sleep. They are also typical characteristics of MIT students.

For MIT students, sleep lies dead last on the priority list, behind psets, UROPs, and papers. Losing sleep is quite common. It's no shocker that the new mental health campaign was named "Sleep is for the Strong." I thought that when I came here, I would get more sleep since my MIT classes start at 9 in the morning, as opposed to 7:30 as in high school. On good nights, I get the same amount of sleep as I used to — which is to say, not very much.

Falling asleep from pure tiredness was not working out for me, so I thought I'd give the whole normal sleep routine a try. But every attempt ended the same way: I could never fall asleep. Possibly because my room broke all of the typical sleep rules like turning all the lights off and removing distractions such as cell phones. Regardless of whatever caused my sleepless nights, I had to find another way to catch up on sleep: napping.

The first step of napping, as any pronapper would know, is to find a comfortable spot. Ideally, that would be my bed. However, I live in Next House, and if I wanted to maximize the amount of shuteye I get, I had to find closer napping quarters

My first napping place was the Dollar Lounge off the Infinite. The room appeared cozy enough and was pretty close to my next class, so I thought I'd give it a try. With a surprisingly comfortable floor and calming atmosphere, the place has its merits. However, the noise bumped my rating of the place down to a three out of five for napping.

First off, you hear all of the noise that comes from people moving through the Infinite. The sound of feet shufflings makes up most of the noise. But then the tour groups come. We've all seen this: a large procession of people follows one MIT student, conveniently screaming at the top of their voice about the Infinite — and more specifically, how the Dollar Lounge is where students "take a break" or "nap," which always elicits awkward chuckling.

Not only can you hear everything in the Dollar Lounge, it is also a popular destination for the paparazzi, also known as the tourists with cameras. More specifically, the ones that decide it is OK to take a picture of MIT students in their "natural habitat." As far as I know, there are no pic-

tures of me sleeping in the Dollar Lounge on the Internet, but to minimize that risk, I checked out some other napping places.

Coming off the Dollar Lounge, my objective for the next napping place was to minimize noise. What could be better than the room where it is absolutely silent 24 hours a day: the reading room in Barker.

In many ways, Barker is the unofficial room of the unofficial napping club of MIT. At any given moment, at least five people will be snoozing on the comfy green chairs. Occasionally, some nappers will even be decked out in their eye shades. If your ideal sleeping place is so quiet you can hear a pin drop, or someone breathe, then you should nap in the reading room. Movable green booths lie in front of all the chairs, perfect for stretching out while nicely arranging yourself to fit in the green square. After my first 90 minute nap at Barker, I thought my napping search was over.

Then one unlucky afternoon, I darted over to Barker, all ready to pass out, and saw my worst nightmare: all the green seats were taken. My jaw dropped. Was I going to have to go all the way back to Next? Would I have to settle for the Dollar Lounge? Begrudgingly, I started to walk towards the exit. As I passed the library elevators, it hit me: what about the eighth floor of Barker?

The rumor was that it was a nice place, and since there was not much to lose at that point, I ventured to my third napping spot.

Thank god I did.

The eighth floor of the library has amazing group work spaces, whiteboards included. More importantly, they have large, comfy red chairs. While not as soft as their green companions in the reading room, they are much larger. Specifically, they have large enough armrests for me to put my head on. And enough space for me to curl up into a ball. I was willing to sacrifice a little more noise for this beautiful chair.

I loved napping long before I ever set foot on MIT's campus. Now, it is even more enjoyable because of the MIT napping culture.

No one judges you for napping in the middle of Barker. Everyone knows that we are MIT students and that sleeping the right amount is pretty hard here. When I nap next to a fellow student, whether it's my big or a stranger, I feel a special connection. Together, we are reenergizing our bodies for the next round of battle (aka MIT). Napping lets me stay awake during class. And more importantly, it has given me another reason to say IHTFP.

Michal Shlapentokh-Rothman is a member of the Class of 2019.

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TV REVIEW

The Man in the High Castle

Amazon's new alternative history sci-fi series

By Karleigh Moore

ARTS EDITOR

It wasn't hard to make the decision to spend this past weekend on my couch recovering from Thanksgiving festivities by binge watching a new TV show. The real choice to make was deciding which series I should spend my precious long weekend devouring. Eventually, I settled on Amazon Studios' new alternate history sci-fi series The Man in the High Castle. The show is based on a novel of the same name by Philip K. Dick (Blade Runner and Minority Report were also based on his work), was created by Frank Spotnitz (a writer and producer from X-Files), and has Ridley Scott (director of Alien, Blade Runner, Gladiator) as an executive producer. From this line up alone, I expected a pretty epic

The best part about the show is the alternate history premise. The Axis powers defeated the Allies in WWII, and now the Japanese and Nazi governments are world superpowers. The setting is 1960s Greater Nazi Reich (formerly the eastern half of the United States of America) and the Pacific States of America (formerly the western half of the United States of America). Throughout the series, we learn about resistance groups who locate and transport mysteri-

ous contraband films that depict the Allies overcoming the Axis powers, and both the Japanese and Nazis take extreme measures to intercept these films. We aren't sure if these films are real, or what they mean — all we know is that they allegedly come from a figure known as "The Man in the High Castle" and that resistance members are willing to risk losing their lives (or being tortured or having their families executed) for the sake of protecting these films.

The show is visually striking. It was unnerving to see New York City's Time Square adorned with swastikas and teeming with Nazi soldiers. Young boys go off to school dressed in Nazi Youth uniforms and V-A Day (Victory over America Day) is celebrated in the Greater Reich like a mash-up of the Fourth of July and Thanksgiving (complete with turkey, apple pie, and fireworks). Meanwhile, in San Francisco, the Kempeitai (Japanese military police) begin grand preparations for the arrival of the Japanese Crown Prince.

Joe Blake (Luke Kleintank) and Juliana Crain (Alexa Davalos) meet in the Neutral Zone (a lawless area located near the Rocky Mountains) both on missions regarding these puzzling films. The pair serve as our main characters for most of the series, and many episodes are devoted to developing and exploring their relationship. In fact, I'd

say too much time was allocated for this as the first few episodes really dragged during this phase, especially because I found these characters bland. The action and intrigue of the show pick up when we meet Obergruppenführer John Smith (Rufus Sewell), a high ranking official in the Nazi SS, and the Japanese Trade Minister Nobusuke Tagomi (Cary-Hiroyuki Tagawa) — Sewell and Tagawa's characters are easily the most compelling due to incredible acting and strong writing. Burn Gorman (Pacific Rim, Torchwood) also gave a notable performance as the ruthless bounty hunter, ominously known as The Marshall, who poses a serious threat to Juliana and Joe's film delivery operation.

Despite the strong performances, the show is brought down by the plot, which was slow and obtuse at times. Joe and Juliana spent too much time doing not much of anything in the Neutral Zone (this spans several episodes, and there are only 10 in total). Many of the events and characters' motivations aren't explained until the last few episodes, and even then, we've all but lost our interest in finding the answers (which largely end up uninteresting). The show hints at compelling themes, exploring parallels between the world we know and live in today and the world that could have been had this alternative history unfolded. What

The Man in the High Castle

Created by Frank Spotnitz

Based on a novel of the same name

Premiered November 20, 2015

On Amazon Video

does it mean to be oppressed? How much of your freedom are you willing to trade for peace, safety, and stability? These questions and themes are raised, but not explored to anywhere near their full potential.

Usually, I find it easy to give a verdict regarding a show, but I have incredibly mixed feelings about this one. On the one hand, I was (and still am) intrigued by the premise of the series, but on the other, I was disappointed because the show's creators could have done so much more with the rich universe and characters they had created. If the premise of the series appeals to you, I'd recommend watching it and then reading the novel, but if not, I'd go with Sense8 or Jessica Jones instead.

BALLET REVIEW

Boston Ballet's *The Nutcracker*: A sure sign of the holidays

An immaculate welcome to the Christmas season



The Boston Ballet in Mikko Nissinen's The Nutcracker.

ROSALIE O'CONNOR

The Nutcracker Performed by Boston Ballet Boston Opera House Running through December 31

By Ray Wang

STAFF WRITER

Every holiday season, the Boston Ballet adorns its atrium with Christmas trees and festive laurels in preparation for its annual performance of *The Nutcracker*.

With a beloved score by Pyotr Ilyich Tchaikovsky, *The Nutcracker* delights audiences of all ages.

At the premiere last Friday, it seemed like there were more families than at any other ballet. And it's easy to see why. *The Nutcracker* is playful and concise (coming in at around two hours), while visually sophisticated and elegant.

The story follows a young girl, Clara Silberhaus (Delia Wada-Gill), and her mysterious godfather, Drosselmeier (Paul Craig), on a Christmas Eve adventure. After Drosselmeier gives her a beautiful toy nutcracker, Clara dreams of it coming to life and taking her and her godfather to magical lands.

The set and costume design, by Robert Perdziola, are captivating. As Clara and the nutcracker pass through a snowy forest to the Land of the Sweets, sparkling snow emanates from the rafters onto their majestic carriage.

The Land of the Sweets has some spectacular performances. Petra Conti and Sabi Varga as Arabian coffee are silky and graceful, and Conti impressively moves her body like a contortionist to the slow and exotic oboe.

But the audience gave the most applause to the energetic Russian Dance, from Isaac Akiba, Albert Gordon, and Samuel Zaldivar. The most exciting dance of the ballet, the Russian Dance, or Trepak, showcases boundless athleticism from the three dancers in a breathtaking minute.

My favorite ballerina, whom I've praised in the past for her surprising expressiveness, is petit principal dancer Misa Kuranaga. As the Sugar Plum Fairy, she looked diminutive next to the muscular Paulo Arrais as The Nutcracker. She's a splendid fit for her sweet and good-natured character.

The ballet is also filled with humorous moments, often the result of fabulous costume work from Perdziola. Mother Ginger, who appears in the Land of the Sweets, has a comically huge hoop skirt that houses her many children. The magical dancing bear, who appears as a gift of Drosselmeier, drew laughs for his ridiculous stunts but also praise for his technical skill in a full-body costume.

As long as the Boston Ballet exists, I'm sure they'll be performing *The Nutcracker* every holiday season. The timeless classic, with a huge cast of children, is inspirational to aspiring dancers and a necessary tradition for many families. There's ample opportunity to see it — The Nutcracker runs through Dec. 31.

Thursday, December 3, 2015 The Tech 9

Solution to Smelly

from page 14

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Solution to Where's Tonto?

from page 14

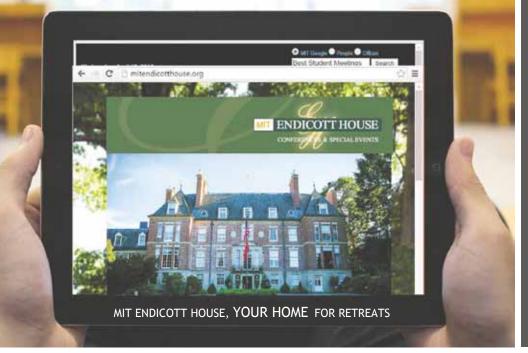
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Solution to The Write Solution

from page 1



BEST STUDENT MEETINGS



"You will not find a more impressive place to hold anevent than MIT's Endicott House. It is a relaxing and pleasant departure from the bustle of campus. I take particular pleasure in having students experience an event at the House. They are invariably astonished that MIT boasts such a refined and architecturally stunning facility, and that, as part of our community, they have the privilege of enjoying it."



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SLEEP, CIRCADIAN RHYTHMS, HEALTH AND PERFORMANCE

Learn about the regulation of sleep and alertness, and the application of circadian physiology to occupational medicine/health policy, particularly as it relates to the extended duration of work shifts and long work weeks.

Wednesday, December 9, 2015

The Stata Center 32-123/Kirsch Auditorium 4:30-5:30PM

Refreshments 4:15PM

Biography:

MI ENDICOTT HOUSE

Charles A. Czeisler, Ph.D., M.D., F.R.C.P., F.A.P.S. is chief of the Division of Sleep and Circadian Disorders, in the Departments of Medicine and Neurology at the Brigham and Women's Hospital and the Baldino Professor of Sleep Medicine and director of the Division of Sleep Medicine at Harvard Medical School. Dr. Czeisler has more than 40 years of experience in the field of basic and applied research on circadian disorders.

For more than a decade, Dr. Czeisler served as team leader of the Human Performance Factors, Sleep and Chronobiology Team of NASA's National Space Biomedical Research Institute, which is responsible for developing sleep-wake schedule guidelines and related countermeasures for use by NASA astronauts and mission control personnel during space exploration. He led the sleep experiment in which Senator John Glenn participated during the STS-95 space shuttle mission in 1998. Just this year, he and his colleagues at BWH received the NASA's Johnsons Space Center Director's Innovation Award in Houston, for designing a new solid state lighting system that is being installed on the International Space Station this year to improve the sleep of astronauts.



Charles A. Czeisler, Harvard Medical School

Dr. Czeisler's research is focused sleep, circadian rhythms, health and performance in humans. Of particular concern to Dr. Czeisler is the epidemic of sleep deficiency in our society with its wide-ranging implications for health, wellness, and the economy.

He is chairman of the Board of Directors of the National Sleep Foundation and Past President of the Sleep Research Society. Dr. Czeisler, who has over 275 publications, was awarded an Honorary Fellowship of the Royal College of Physicians, is an elected member of the Institute of Medicine of the National Academy of Sciences and was elected as an inaugural Fellow of the American Physiological Society. He earned his undergraduate degree from Harvard College and his Ph.D. in neuro- and bio-behavioral sciences and M.D. from Stanford University.

Visit: www.csail.mit.edu for more information or contact: 617-235-0145







10 THE TECH THURSDAY, DEC

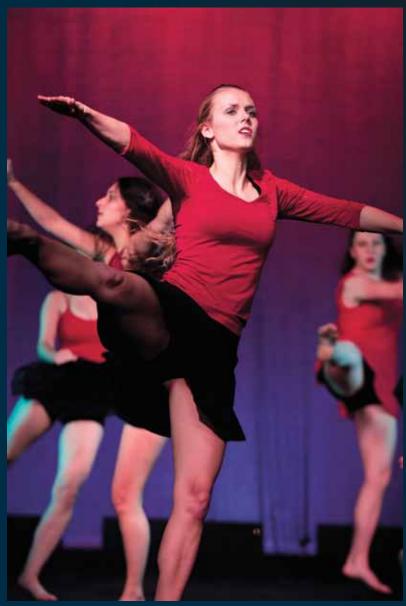


DanceTroup

STEP UP:

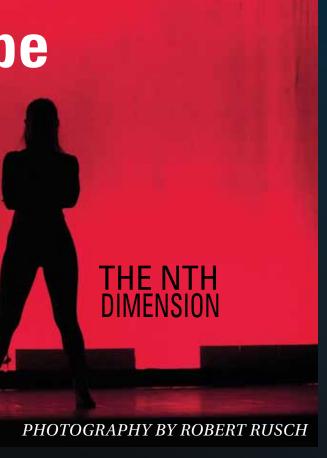


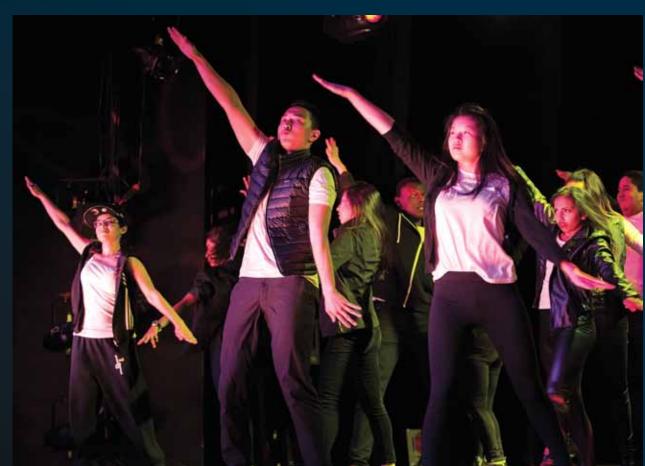






CEMBER 3, 2015 THE TECH 11

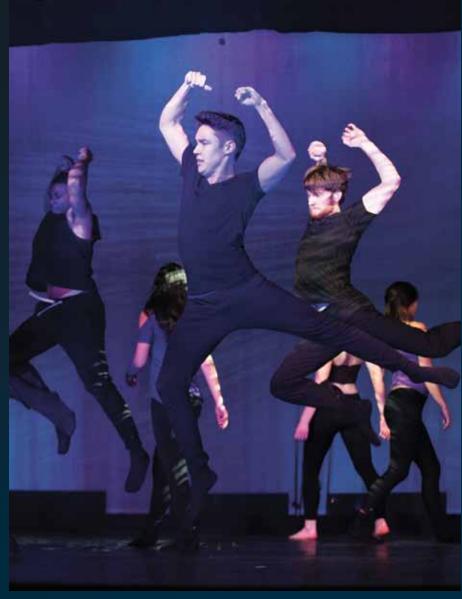












12 THE TECH Thursday, December 3, 2015

Come celebrate decades of dedication and support of MIT.

75th

Anniversary



Reception in Lobby 10 December 10, 2015 Noon – 3:00 pm

Raffle prizes, music, and sweet and savory treats.

Dear MIT students,

This December marks the 75th anniversary of the MIT Annual Fund. Created in 1940 by a group of alumni who banded together in turbulent times to bolster MIT's mission of research and teaching, the MIT Annual Fund has since enabled generations of faculty and students to push forward the boundaries of knowledge and create entirely new fields.

I am proud of those early alumni who had the foresight to light this fire. And I am proud that MIT has in the intervening years been sustained by the energetic support of so many friends and alumni, and an ever-increasing number of students.

You, the students of MIT, particularly inspire many of our alumni to give back to our community, and so I hope you will join us in celebrating this milestone. This gathering—on the last day of classes—is planned specifically with you in mind.

The support so many continue to give to the MIT Annual Fund not only provides needed resources; it reinforces the notion that we are doing meaningful work that people continue to care about. I couldn't be more grateful to be part of such a generous and purpose-driven community, and hope you'll join MIT in celebrating 75 years of dedication!

Sincerely,

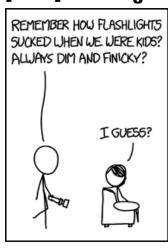
W. Eric L. Grimson, PhD '80

Chancellor of Academic Advancement

THURSDAY, DECEMBER 3, 2015 **THE TECH 13**

A WEBCOMIC OF ROMANCE, SARCASM, MATH, AND LANGUAGE by Randall Munroe

[1603] Flashlights



WELL, I DISCOVERED THERE ARE NOW INTERNET FLASHLIGHT ENTHUSIASTS. AND THE TECHNOLOGY HAS ... IMPROVED. OK, LETS SEE.

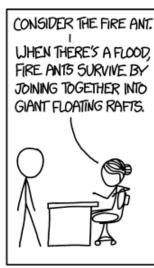


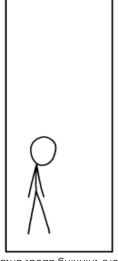


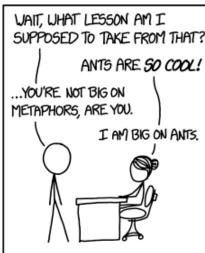
capable of setting trees on fire. They're impossible to use without severe burns, but some of them swear it's worth it. Due to a typo, I initially found a forum for serious Fleshlight enthusiasts, and it turns out their highest-end models are ALSO

[1610] Fire Ants



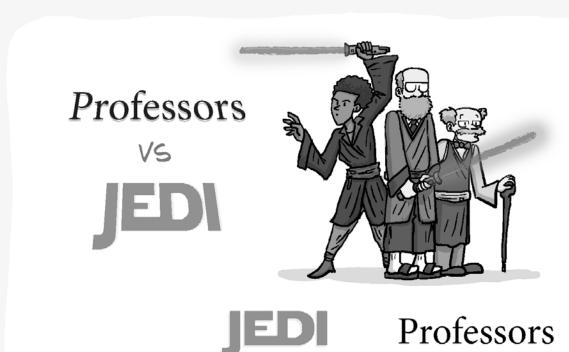






(2) we forgot the question because we were thinking about ants. Here in the entomology department, we have a simple two-step formula for answering any question: (1) ants are cool, and





Wears robes:

Plays mind tricks on you:

Light Saber

Favorite tool:

Grad Labor

Follows order from:

Yoda

Yo' Department Head

Mantra:

"Use the Force"

"Use the Funds"

Fights for:

The Galactic Republic

Grants from the Public

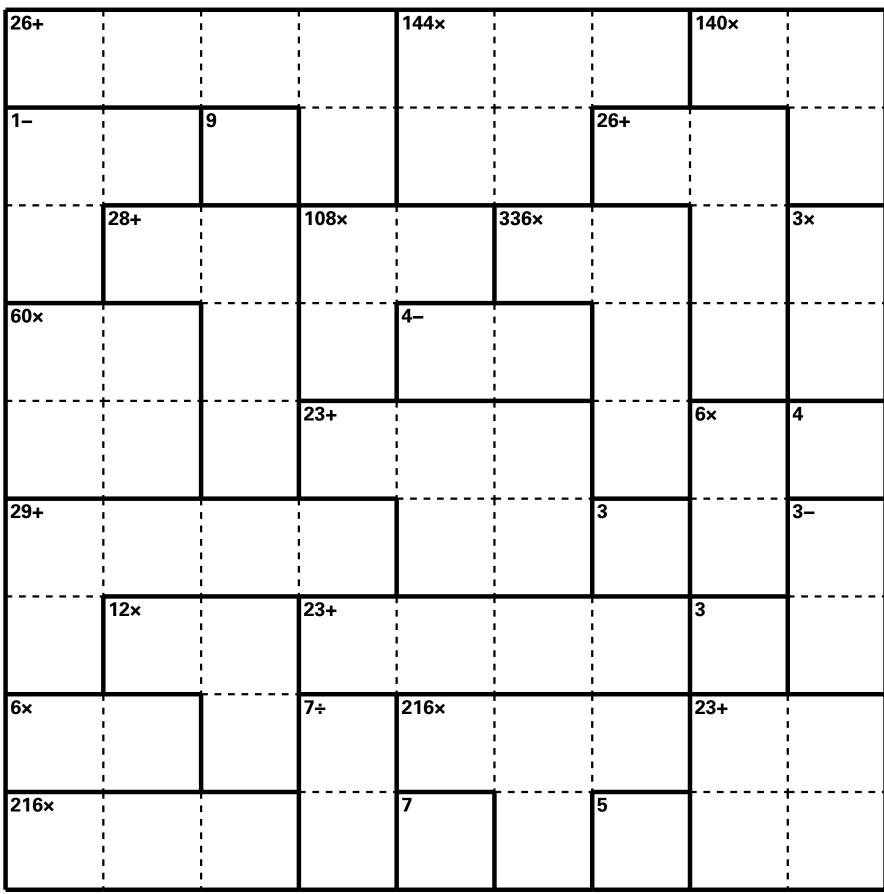
Shocking revelation: "Luke, I am your father."

"Look, I am first author."

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FUNFUNFUNFUNFU

Smelly Reading Room



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–9. Follow the mathematical operations for each box.

Where's Tonto? by S.N.

ACROSS

- 6 Whodunit staple
- 11 Southern end of I-95 14 See 57 Across
- 15 Lightly bite
- 16 Curtain accessory
- 17 Oversight 18 A dog's age
- 19 Typical pass catcher
- 20 Spa treatment 22 Sly glance
- 23 Timetable datum 24 Necks of land
- 25 Early settlers of Iceland
- 26 Feudal toiler 28 One, in Naples
- 29 Test pilots' garb
- 30 All of a sudden
- 33 Whodunit staples
- 34 With 36 Across, conservation career
- 36 See 34 Across
- 38 Actor Aykroyd
- 39 Ballet routine
- 41 From Kolkata 43 First Mad Men airer

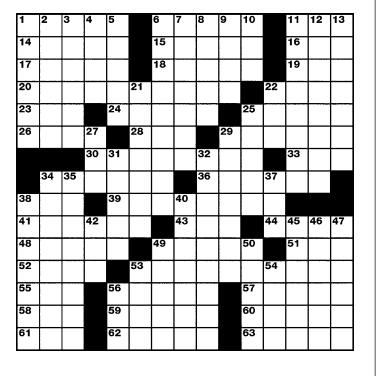
- 44 Cobbled together
- 49 NL East player
- 51 Archaeological site
- 52 Military outpost
- 53 FiveThirtyEight blogger
- 55 Monday Night Raw airer 56 Split hairs
- 57 With 14 Across, western
- capital
- 58 Fall from grace 59 "I wanna play, coach!"
- 60 Pothook shapes
- 61 Unfortunate
- 62 Looked frightened
- 63 Is staggered

DOWN

- 1 Recital program
- 2 Price for a promo 3 Evening train amenity
- 4 Attempt
- 5 Donut shape
- 6 Before you know it 7 Surmount
- 8 "No thanks"

- 9 Conifer covering
- 11 Something for nothing
- 12 Southern state symbol
- 13 Talk about
- 21 Encourages
- 22 Football coach Holtz 25 Timberlake's former band
- 27 Out of reach
- 29 Quick looks
- 31 Test-version apps
- 32 Restrained 34 Film with Mickey mangling
- 35 Cable TV service
- 37 Shining example 38 Talk about
- 40 Emmy category
- 42 Prankster
- 45 Give counsel to
- 46 German engineer/inventor
- 47 Exit
- 49 Orange variety
- 50 River near da Vinci Airport 53 SpaceX client

- 54 Squander 56 Half pint



NFUNFUNFUNFUNFUN

Dewey

Solution, page 19

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	1		6		4	2	8	

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Hayden

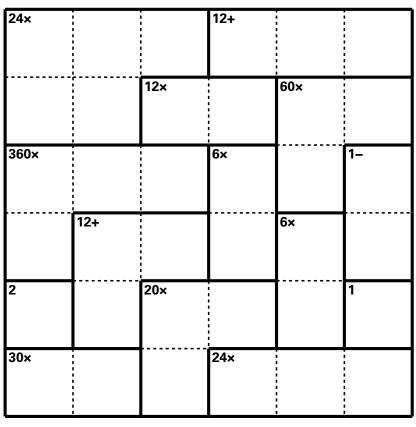
Solution, page 19

7					1		5	2
		8		2				9
					9	4	7	3
1	9				7			8
				8				
8			5				4	6
3	8	7	6					
8 3 5 9				7		3		
9	2		1					7

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Rotch

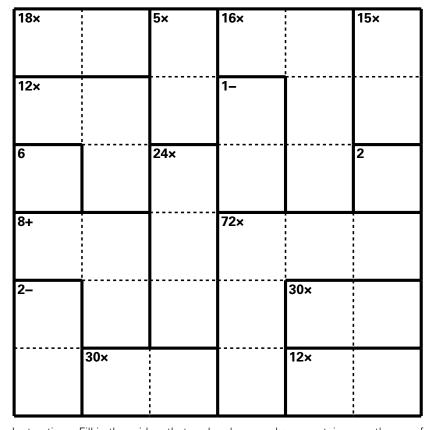
Solution, page 19



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

Barker

Solution, page 19



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1-6. Follow the mathematical operations for each box.

The Write Solution by Greg Johnson

Solution, page 9

ACROSS

- 4 Soothing ointment
- 8 Mown path
- 13 Thailand's former name
- 14 On vacation
- 15 Spine-tingling
- 16 FOR **AUTOGRAPHING**
- 19 Opinion pieces 20 Grandfather clock
- 21 Make amends 22 Reverend

sound

- Jackson
- 23 Bake sale org.
- 26 Published, as an article
- 27 Ruckus
- 29 Moving ahead
- 31 "Laughing"
- African beasts 34 Has regrets
- about
- 35 FOR STREET

ART

- 39 Scheduled dr.
- 40 Minor blunder 41 Tropical fruits
- 44 CD-__ drive 45 Write down quickly
- 48 Cease 49 Luau, for
- instance 52 Trumpet sound
- 54 Trade-show site 55 Ascends
- 56 FOR STANDARDIZED
- **TESTS** 60 French diarist Nin 61 Sicilian volcano
- 62 Facts and figures 63 Utility billing period
- 64 Accomplishes 65 Early hrs.

DOWN

1 Afternoon nap

- 2 Protestant
- 3 Jordan's capital
- 4 Prohibits
- 5 Leave speechless 6 Jouster's weapon
- 7 Legendary tales 8 Low-ranking sailors
- 9 Used to be 10 Ararat lander
- 11 Trash-bag closer 12 That lady's
- 13 Pickle piece 17 Assent for 8
- Down 18 Japanese soup
- 22 Dr. Salk 23 Artist Klee
- 24 Long haul 25 Web pop-ups
- 28 Morning condensation
- 30 Sandwich cousin
- 31 Den device: Abbr.
- 32 Totally 33 Part of a Girl
- 42 Over again 43 Visionary person 45 Traffic video monitor 46 Planetary paths 47 Electric car company 50 Started a poker pot 51 Handled

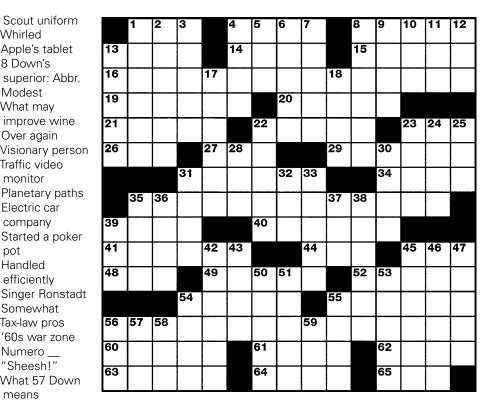
36 Apple's tablet

37 8 Down's

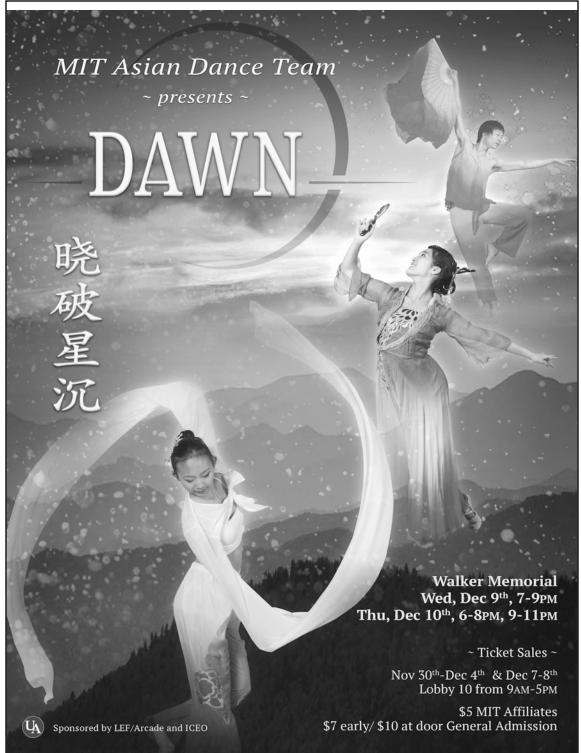
38 Modest

39 What may

- efficiently 53 Singer Ronstadt 54 Somewhat
- 55 Tax-law pros 56 '60s war zone 57 Numero __
- 58 "Sheesh!" 59 What 57 Down means



16 THE TECH THURSDAY, DECEMBER 3, 2015



Reclaiming Conversation

The Power of Talk in a Digital Age

Prof. Sherry Turkle

Director of the MIT Initiative on Technology and Self

Acclaimed by the New York
Times as a "singular voice in the
discourse about technology",
Prof. Turkle will share her
research on our relationships
with technology and
observations on how the digital
age is affecting our humanity.
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student development.

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Friday, December 4 20 Chimneys Student Center (W20) Talk @ 2:00 Meet & Greet @ 3:00

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Sean Perry, Picower Institute technical associate, dies at 39

Fisher, marksman, DIYer recalled as patient, helpful in & outside lab

By School of Science

Sean Perry, a technical associate at the Picower Institute for Learning and Memory, died suddenly in his hometown of Mattapoisett, Massachusetts, on Monday, Nov. 23. He was 39.

For over 15 years, Perry worked in the laboratory of Susumu Tonegawa, the Picower Professor of Biology and Neuroscience at MIT. As a senior lab member, he was relied on for his expertise in a wide range of subjects, including IT support and data management, immunohistochemistry, molecular biology, imaging and microscopy, and animal handling and management. Perry's colleagues describe him as a patient and skilled teacher and coach, and say that he was responsible for training new lab members in fundamental skills. Lab alumni from around the world would come to him for advice, they say.

"What struck me most about Sean was that he was a lifelong learner," Tonegawa says. "Through his own initiative and intelligence, Sean mastered and took on a wide range of crucial roles in the lab, in particular maintenance of the lab's servers and upkeep of advanced light microscopy equipment. We depended on him greatly these past years. The loss of his intellectual curiosity and kindness will leave an unfillable absence in my lab, and in the lives of those who knew him."

Originally from Mattapoisett, Perry graduated from Old Rochester Regional High School and obtained an associate's degree in culinary arts/chef training from Bristol Community College and a BS in biology with honors from the University of Massachusetts at Dartmouth. After spending two years in the Tonegawa lab, Perry spent a year in Amsterdam in the laboratory of Christiaan Levelt at the Ophthalmic Research Institute (now the Netherlands Institute for Neuroscience) before returning to MIT.

Perry excelled in a variety of pursuits outside of work, including power boating, sailing, and fishing. In his first year in the North Atlantic Shark Tournament, he was on the team of the Beagle, which finished in first place. He was also an accomplished competitive marksman, placing in the top five among New England marksmen in two separate competitions this past year. Perry was a former on-call firefighter in Mattapoisett, and plowed snow for the Mattapoisett Highway Department. His other pastimes included photography, playing piano, working with animals, welding, and metal sculpting.

"The loss of his intellectual curiosity and kindness will leave an unfillable absence in my lab," Tonegawa said.

"Sean knew so much about so many different topics, in and outside of the lab," says Jennie Young, Perry's friend and a research scientist in the Tonegawa lab. "People were asking him for advice all the time, on everything from cooking to DIY home improvement projects — and he was always happy to give it. I think everything came so naturally to him that it was easy for him to answer people's questions or to give advice."

In addition to his parents, Diane and Dennis Perry, and his sister, Laura Perry, Perry is survived by his colleague and cousin, Candy Carr, his godparents, Kathy Carr and David Perry, and his uncle, Andy Carr, as well as an extended family of aunts, uncles, and cousins.

Family and friends will be received on Friday, Dec. 4, from 4:00 to 8:00 p.m. at the Saunders-Dwyer Funeral Home at 50 County Rd. in Mattapoisett. A memorial service will be held on Saturday, Dec. 5, at 9:30 a.m. at the funeral home, with burial following in Cushing Cemetery in Mattapoisett. Remembrances may be made in Perry's name to a charity of the donor's choice.

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Thursday, December 3, 2015

Attention continuing students:



Communication-Intensive HASS



Communication-Intensive HASS Writing





If you plan to take a subject designated CI-H or CI-HW this spring, you must select it in pre-registration on WebSIS by **Friday, January 15** in order to have the chance to be scheduled into it.

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Singapore-MIT Undergraduate Research Fellowship (SMURF)

Future buildings and remodels will aim for LEED Gold standard

MIT's Office of Sustainability gave a set of recommendations Monday that will help MIT set its long term plan for sustainability on campus; one long-term goal of the plan is to bring new and newly renovated buildings on campus up to the LEED Gold standard.

The MIT news office said the plan focuses initially on buildings, stormwater, land management, materials, and making labs greener, and will be implemented over the course of 10 months under the guidance of the Office of Sustainability.

The plan purports to be "[a]n integrative vision for our buildings, stormwater, landscape and labs."

The recommendations were released in concert with the recent announcement of the "MIT Plan for Action on Climate Change," which the Institute issued after a year-long series of discussions.

The plan proposes actions that will reduce the use of energy and water on campus and are expected to be executed in June 2016. The process of executing the long-term plan will be managed by the Campus Sustainability Task Force, which was launched last March.

MIT aims to meet or exceed the most recent version of the

national LEED Gold (version 4) certification standard for new campus construction and major renovation. Building E62 (MIT Sloan School of Management) and Building 76 (Koch Institute for Integrative Cancer Research) have already met this criteria.

The recommendations are designed to reduce greenhouse gas emissions at MIT by a minimum of 32 percent by 2030, an amount that was criticized as being too little by the Fossil Free MIT student group.

The plan will encourage decision-makers keep the entire lifecycle of products and materials in mind when making purchases.

Labs will focus on better conserving water and other resources and reducing the amount of waste generated. The plans are not expected to reduce the labs' productivity.

An "Idea Bank" will be launched by the Campus Sustainability Task Force in collaboration with the Office of Sustainability and encourage input from the MIT community. The bank is expected to help to carve out MIT's vision of allowing the campus to grow in a sustainable way. Similar idea banks were set up for climate change and for the future of education at MIT.

—Anshuman Pandey

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MIT TECHIYA PRESENTS



JEWISH, HEBREW, ISRAELI
TECHIYA
A CAPPELLA at MIT

THE CHALLAH GAMES: MOCKINGJAYNE PART 2

SUNDAY 12/6 . 6-120 . 6PM

RECEPTION WITH FREE FOOD FOLLOWS CONCERT

Solution to Hayden from page 15

7	3	9	4	6	1	8	5	2
4	5	8	7	2	3	1	6	9
6	1	2	8	5	9	4	7	3
1	9	6	3	4	7	5	2	8
2	4	5	9	8	6	7	3	1
8	7	3	5	1	2	9	4	6
3	8	7	6	9	4	2	1	5
5	6	1	2	7	8	3	9	4
9	2	4	1	3	5	6	8	7

Solution to Barker

from page 14

3	b			4	5
1	4	5	6	2	3
6	3	4	5	1	2
5	2	3	4	6	1
4	1	2	3	5	6
2	5	6	1	3	4

Solution to Dewey

1	2	9	3	5	6	8	4	7
6	7		1			3	5	2
4	3	5	8	2	7	9	6	1
5	8	3	7			4	2	9
7	9		4	3	2	5	1	8
2	4	1	9	8	5	6	7	3
9	6	2	5	7	8	1	3	4
8	5	4	2	1	3	7	9	6
3	1	7	6	9	4	2	8	5

Solution to Rotch

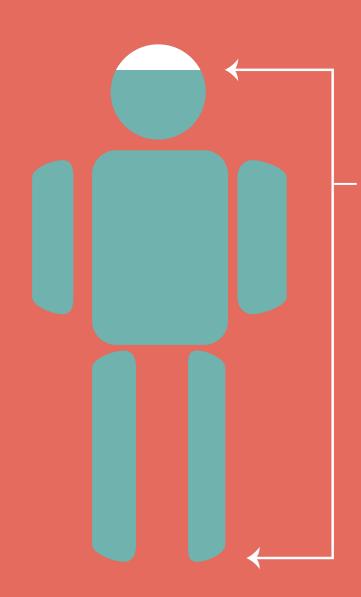
from page 15

6	1	2	3	4	5
1	2	3	4	5	6
4	5	6	1	2	3
3	4	5	6	1	2
2	3	4	5	6	1
5	6	1	2	3	4

Be a PENguin write for us







of MIT students trust that their friend will watch out for them.

IT'S ON US, MIT, TO HAVE EACH OTHER'S BACK.





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Semester review: student athletes shine in fall 2015

Student achievements include a world title, program records

By Souparno Ghosh

This time last year, the MIT football team was the talk of the town. Following an unbeaten 9-0 regular season and a thrilling NCAA playoff victory in overtime, the Engineers hogged all the limelight and deservedly so. But just in case if you were wondering if Fall 2015 has been a quieter season for MIT sports, here is what you might have missed.

Program records were broken, Academic All-America honors were earned, and MIT graduate student Alexis Sablone won the Women's Street title at the Skateboarding World Championships in Kimberley, South Africa. From a heartbreaking loss on penalty kicks in the New England Women's and Men's Athletic Conference (NEWMAC) regional semifinals for the women's soccer team to the sheer jubilation of receiving an at-large bid to the NCAA playoffs for the women's volleyball team, MIT athletes experienced a gamut of emotions during the pivotal weekend when MIT hosted the NEW-MAC regionals in four different sports. Here, in our last issue of 2015, we reminisce about some of the incredible achievements of MIT student-athletes this past semester.

Alexis Sablone wins World Championship

Alexis Sablone G won the Women's Street World Championships at the Kimberley Diamond Cup for skateboarding in October. Sablone, who has been skateboarding since she was 10, also has two gold and two silver medals to her credit at the X Games.

Men's soccer has historic season

The MIT men's soccer team broke numerous program records, including most wins (18) in a season. The team won the NEWMAC regular season title and reached the NCAA Sweet Sixteen round on the back of a prolific season in front of goal by forward Sean Bingham '16, who became the leading scorer in program history. On the other end of the field, goalie Jake Amereno '16 had a stellar season with 13 shutouts that included a period over 550 minutes in which he did not concede a single goal!

Women's volleyball reaches NCAA regional finals

The women's volleyball team clinched the NEWMAC regular season title and reached the final of the NCAA regionals, falling to Bowdoin at the final hurdle. The Engineers finished with a 30-4 record for the season en route to clinching their second straight regular season title and 17th appearance at the NCAA regionals. Meghan Gebhard '17 became the first player in program history to win All-America honors multiple times, and Abby Bertic '19 was named Rookie of the Year.

Women's tennis goes 10-0

The women's tennis team won the NEWMAC championship with a come-from-behind victory over Babson to remain unbeaten for the season. Trailing 2-4 in the finals, Elyse Kohrs '17 clinched the all-important No. 1 match, a tightly contested three-setter, to turn the tide MIT's away. The Engineers earned a trip to the NCAA tournament (to be played in May) for the sixth time in program history.

SPORTS SHORT

Sauash

MIT (7-4) defeated Stanford for the first time in program history, sealing a 5-4 victory. The Engineers also defeated Hamilton College 6-3 but suffered a loss against Colby 7-2 during the weekend of Nov. 21-22. Justin Restivo '19 and Jeffrey Hu '18 were the only Engineers to win all three of their matches.

Water polo

Ory Tasman '16 scored five goals to lead MIT past U.S. Na-

val Academy 12-8. The Engineers finished in 7th place at the Collegiate Water Polo Association Championships.

Women's basketball

Kara Holinski '19 scored 23 points as MIT defeated Wellesley 67-44 to improve to a 2-2 record this season.

Men's swimming and diving

MIT defeated WPI by a score of 239-55 and Bowdoin College by a score of 250-54.

Gavin Brown '19 won three individual events including the 200-fly (1:54.20), 200-back (1:53.97), and 200 IM (1:56.57).

Women's swimming and diving

MIT swept WPI and Bowdoin College by margins of 227-73 and 195-105 respectively.

Jessica Chen '18 and Catherine Wu '19 each won two individual events and were part of the relay team that clinched 200-medley.

-Souparno Ghosh

Taekwondo club snatches 2nd place at Cornell tourney

Black belts Tam Nguyen, Renee Zhao take silver, bronze for forms; sparring A-team takes bronze

By Jean Chow

TEAM REPRESENTATIVE

On Sunday, Nov. 8, the MIT Sport Taekwondo Club placed second among Division I teams at the second Eastern Collegiate Taekwondo Conference tournament of the season, held at Cornell University.

MIT showed its strength across all divisions with as many as 32 team members competing with strong performances in an action-packed day of forms and sparring.

The day began with forms (poomsae) competitions, in which choreographed techniques are judged based on grace, power, and precision.

Black belt competitors set the stage, capturing silver and bronze. Team member Tam Nguyen G placed second and Renee T. Zhao '18 placed third in the women's division with a technically challenging form.

In the red belt division, Ruben Amaez '16 took first place in the men's division, while Yang Dai '16 placed third in the women's division. Mitchell Hwang '18

earned a bronze medal in the men's blue belt division. In the fiercely competitive white and yellow belt divisions, Dong-Gil Shin '16 earned a gold medal in the men's yellow belt division, while Johan Kotze '17 claimed bronze. Gina Yuan '19 earned a bronze medal in the women's yellow belt division.

After outstanding performances in the morning of forms competition, MIT kept the energy going in the afternoon sparring sessions.

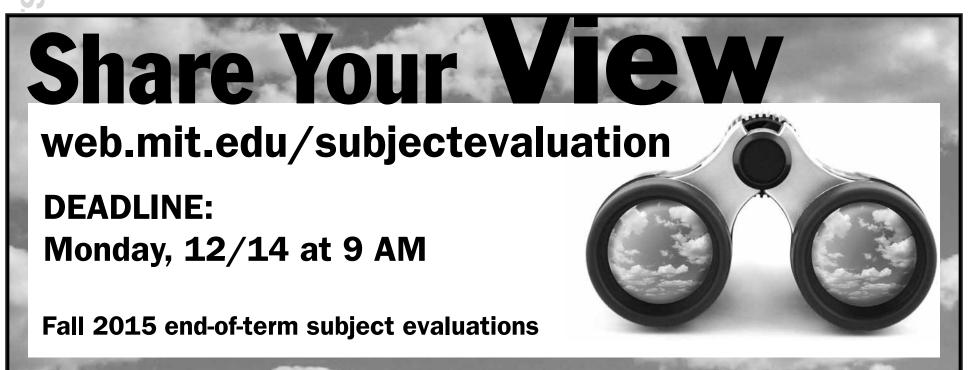
The men's and women's advanced level teams (A-team) displayed a strong performance in sparring. The women's A1 team comprising of co-captain Andrea S. Guatemala '16, Maria Alexis G, and Nguyen took bronze, advancing over Cornell A2 before falling to Princeton in tightly contested matches.

In the B-Team (intermediate) competition, women's B1 comprising of Jean Chow '16, Dai, and Rachel T. Harris '17 earned a bronze medal. The team advanced over the Elmira and Penn State teams before falling to Cornell B2 in the semifinal

round. The men's B1 of Akwasi Owusu-Akyaw '17, Amaez, and Hwang scored solid wins over University of Connecticut and West Point en route to earning a bronze medal.

In the C-Team (beginner) competition, we saw some of our rookies showcase their determination and strength. The men's C1 Shin, Corey Ferrier '19, and Kotze overcame injuries to earn a bronze medal in one of the largest sparring divisions. After defeating the Penn State, Cornell, Tufts, and Princeton teams, the men fell to the eventual gold medalists West Point C1 in the semifinal round after some very close matches.

Particularly noteworthy were the enthusiasm and spirit of the team members as they rallied and cheered each other on during the entirety of the tournament. The team's energy transcended the boundaries of the ring and motivated the competitors to fight harder and go further for their teammates. At the end of the day, MIT totaled 464 points, placing second in Division I of the league.



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