Design of GradRat unveiled yesterday

Controversial elements: included Dropbox logo, excluded IHTFP

By Shirley Chen

It takes more than smooth jazz, fancy desserts, and chocolate fountains to lure graduate students out of their labs and into the Walker Memorial on a Thursday evening. But the unveiling of the GradRat — the MIT graduate ring — managed to do so anyway.

Unlike the iconic undergraduate Brass Rat, which is customized by each class, the GradRat is only redesigned once every five years. The first GradRat came out in 2003, echoing MIT’s increasing graduate student population. The one unveiled yesterday was the third-generation GradRat.

Representations of grad life, good humor, and references to current events are the most prominent themes in the design of the GradRat.

The bezel features a beaver holding a branch and elements such as an overturned coffee mug and a night skyline, all references to the nocturnal work habits of many graduate students.

The GradRat includes other traditional Brass Rat staples such as ivy leaves floating in the river. On the bottom right of the bezel, the beaver has carved “4/15” the date of the 2013 Boston Marathon, on a whim.

GradRat, Page 11

Swartz report spurs MIT to hold forums on open access, computer crime

In response to questions raised after the prosecution and death of Internet activist Aaron Swartz, MIT will arrange gatherings for the community to discuss ethics and information technology. Provost Chris Kaiser and Faculty Chair Steven Hall announced Wednesday.

The dates of the gatherings will be announced “in the coming weeks,” according to their email to the MIT community.

Kaiser and Hall also announced a new website, swartz-review.mit.edu, where MIT affiliates can comment on questions posed in a report written after President L. Rafael Reif appointed a report writing team to look into the role MIT played in 2011’s Swartz prosecution. The website will also provide a link to the report written by Harvard’s Jameel Swartz.

The questions:

Should MIT increase its efforts to bring its considerable technical expertise and leadership to bear on the study of legal, policy, and societal impact of information and communication technology? The authors of the report (Abelson, economics professor Peter A. Diamond PhD ’59, and Andrew Grosso, a lawyer based in Washington) suggested that through its inaction and reticence during Swartz’s prosecution, MIT did not live up to its reputation for “leadership in information technology.

What are MIT’s institutional interests in the debate over reforming the Computer Fraud and Abuse Act? In one of the report’s rare displays of opinion, the CPAU under which Swartz was prosecuted is called “a poorly drafted and questionable criminal law as applied to modern computing, one that affects the Internet community as a whole and is widely criticized.” A House subcommittee is

Swartz, Page 14
Privacy groups ask FTC to block Facebook policy changes

A coalition of six major consumer privacy groups has asked the Federal Trade Commission to block coming changes to Facebook’s privacy policies that they say would make it easier for the social network to use personal data about its users, including children younger than 18, in advertising on the site.

In a letter sent to the agency late Wednesday, the coalition said the changes, which are expected to go into effect early next week, violate a 2011 order and settlement with the FTC over the way Facebook used personal data without its users’ consent.

“Facebook users who reasonably believed that their images and content would not be used for commercial purposes without their consent will now find their pictures showing up on the pages of their friends endorsing the products of Facebook’s advertisers,” the letter says. “Remarkably, their images could even be used by Facebook to endorse products that the user does not like or even use.”

The plain language in Facebook’s new policy documents seems to reverse the default setting for user privacy when it comes to advertising.

—Vinda Goel, The New York Times

Minnesota Orchestra musicians reject latest offer

The labor standoff that cost the Minnesota Orchestra its entire last season, and is impeding the coming season, was extended Thursday, when the orchestra’s locked-out players voted to reject the latest contract offer put forward by management.

The offer that the musicians rejected was made by the orchestra’s management last week. It called for the players to return to work for two months at their old salaries, and then, if no new deal was struck, to work for two years with their base pay cut by 12 percent.

The musicians called on the orchestra’s board to accept a proposal made by George Mitchell, the former senator and Middle East envoy, who is acting as a mediator in the dispute.

“Michael Cooper, The New York Times

In Syria, Iraqis see replays of their past and fears for future

The Tech

By Tim Arango

Baghdad — Abu Mohamed spent Tuesday night washing the bodies of victims of that evening’s car bomb, preparing them for burial. When a couple of roadside bombs went off the next day, he did the same thing.

If he is not here, then, he is in Syria fighting to defend the government of President Bashar Assad. Both duties, he says, are in response to the same kind of state attack before any inmates became seriously ill. Jeffrey Beard, secretary of the California Department of Corrections and Rehabilitation, said in a written statement. He added that the department would “continue to implement the substantive reforms” that began after hunger strikes two years ago.

The labor standoff that cost the Minnesota Orchestra its entire last season, and is impeding the coming season, was extended Thursday, when the orchestra’s locked-out players voted to reject the latest contract offer put forward by management. The musicians called on the orchestra’s board to accept a proposal made by George Mitchell, the former senator and Middle East envoy, who is acting as a mediator in the dispute.

Michael Cooper, The New York Times

European Central Bank chief tamps down optimism

By Jack Ewing

Frankfurt, Germany — The president of the European Central Bank issued a sober assessment of the continent’s economic prospects Thursday, that he was “very, very cautious” about prospects for growth and acknowledging concern about shock waves from the civil war in Syria.

“I can’t share the enthusiasm about building growth in the eurozone, Mario Draghi, the bank president, said at his monthly news conference. “These shoots are still very, very green.”

The central bank kept its benchmark interest rate at a record low of 0.5 percent Thursday, which had been expected after recent economic indicators showed the eurozone economy was beginning to recover, albeit weakly. Draghi said the bank had not ruled out future rate cuts.

“We certainly are alert to the geopolitical risks that may come from the Syrian situation,” he added.

Draghi’s remarks were unexpect- edly pessimistic and could dampen hopes for growth among European policymakers that the eurozone is finally improving, after a stubborn recession that has pushed unemployment to more than 25 percent in many countries. The central bank also revised its forecast for eurozone growth in 2014 from 1 percent to 1.1 percent.

The bank may not welcome un- due optimism about the eurozone economy because it could cause market interest rates to rise and make credit even more unaffordable for the businesses and households in Southern Europe that need it most.

“Mr. Draghi believes investors are jumping the gun on the state of the eurozone economy and is provid- ing a reality check in an effort to talk down market rates,” Nicholas Spiro, managing director of Spiro Sovers- troy Group, said by email.

European stocks rose and the dollar reached a six-week high against the euro while Draghi spoke, suggesting some economists were concerned about a deepening recession and the dollar rose. Draghi also said the bank’s Governing Council, which holds its monthly monetary policy meeting Thursday, had not ruled out further cuts in the benchmark interest rate. During the debate Thursday, he said, some members argued against a cut because of signs of better growth, while others noted that growth re- mains tentative.

Missed an issue? Click here to access the archives.

The Tech Friday, September 6, 2013

Inmates end hunger strike in California

Los Angeles — Inmates at California state prisons have ended a two-month hunger strike, corrections officials and inmate advocates announced Thursday.

The strike was organized to protest the state’s use of solitary confinement, in which some inmates have been held for years without trial. The third such strike in Cali- fornia state prisons since 2011.

At its peak in July, 30,000 inmates across two-thirds of the state’s prisons joined in the food protest. That number had dwindled to about 100 this week, according to prison officials.

“The strike has been ended because before any inmates became seriously ill.” Jeffrey Beard, sec- retary of the California Department of Corrections and Reha- bilitation, said in a written statement. He added that the department would “continue to implement the substantive reforms” that began after hunger strikes two years ago.

In a statement, the organizers of the protest, who are be- ing held in isolation units at Pelican Bay State Prison, said the strike was called off after two months because officials had not met their demands.

“Inmates on hunger strike for the next few days: Partly cloudy and warmer. High 79°F (26°C). Low around 60°F (16°C). SW winds at 10 mph.

Friday, September 6, 2013

Situation for Noon Eastern Time, Friday, September 6, 2013

Weather

Fall weather envelopes New England

By Shaena Berlin

SUNNY, AUGUST WEATHER

Fall season has arrived and with it autumn weather. The overnight lows are dipping below 60°F, resulting in chilly mornings perfect for intense outdoor exercise. Daytime highs have remained in the 70s°F for the next few days, with partly cloudy skies but no significant storms expected. Elsewhere in the Northeast, areas of MA, NY, VT, NH, and ME expected their first frost and freeze warnings this morning.

September is a typical time for temperatures to cool down, but this week marks only the halfway point of the Atlantic hurricane season. To date, there have not yet been any named storms named hurricanes; however, there remains potent- ial for many storms before the official end to the season on Nov. 30.

Extended Forecast

Today: Sunny with calm winds. High 70°F (21°C).

Tonight: Clear and chilly. Low 54°F (12°C). W winds near 5 mph.


Monday: Partly cloudy with a high near 68°F (20°C). Low around 52°F (11°C).
Australia's prime minister, facing election, drops in poll

By Matt Siegel

SYDNEY — Prime Minister Kevin Rudd's hopes of leading Australia to lesser emissions taxes, sharply and publically opposed by his conservative opposition leader Tony Abbott, seemed to evaporate on Thursday when the Labor Party, which has unambiguously taken a position in favor of reducing international flights in and out of Australia's major airports, losing ground in opinion-polling for the upcoming federal elections.

In a survey released Monday by Newspoll, based on polling from Aug. 26 to Sept. 1 among 1,180 voters, Abbott was shown for the first time to have overtaken Rudd as the nation's preferred prime minister by 43 percent to 41 percent, although the difference between them is within the poll's margin of sampling error of plus or minus 3.1 percent points.

The same poll showed Labor trailing the opposition coalition, 50 percent to 46 percent. That result would prove disastrous for Rudd and deliver a resounding majority in Parliament for Abbott.

"Maybe our Lord will materialize from the back of a cow and tell Kevin Rudd and anoints him as a new Messiah on earth," said Rick Kuhn, a professor of politics at the Australian National University. "But in my own opinion of that, I don't think it's going to happen.

Saturday's election will mark the end of the longest campaign in Australian history. The contest, although officially declared by Rudd last month, has been effective since January, when Gillard officially declared by Rudd last month, has been effective since January, when Gillard

Europe offers compromise to US on airline emissions taxes

By James Kanten

WASHINGTON — The share of middle and high school students who use e-cigarettes doubled from double the previous year, federal data show. The rise is prompting concerns among health officials that the new devices could be creating as many health problems as they are solving.

One in 10 high school students said they had tried an e-cigarette last year, according to a national survey by the Centers for Disease Control and Prevention, up from 1 in 20 in 2011. About 3 percent of middle school students had used e-cigarettes.

"This is really taking off among kids," said Dr. Thomas Frie- den, director of the CDC.

E-cigarettes are battery-powered devices that deliver nicotine that is vaporized to form an aerosol mist. Producers promote them as a healthy alternative to smoking. Youngsters say their health effects are not yet clear, although most acknowledge that they are less harmful than traditional cigarettes. The Food and Drug Administration does not have the resources to analyze experts that the agency will start soon.

Egypt's interior minister survives assassination attempt

By David D. Kirkpatrick and May El Sheih

CAIRO — A powerful bomb tossed through a convoy of cars car- rying a senior police officer, an ex-soldier, and a civilian killed a dozen people, including the officer’s mother, and scattered in the street as far as 150 feet outward but the beginning, "Interior Minister, has struggled to shake Dios "sor, "said Mahmoud Saed, 22, a salesman. "I saw a leg, some toes, and another leg and some burned bits and pieces.

The minister escaped and so did his wife, but her left hands were broken. But the ex-plosion killed at least one police officer, injured 10 others and wounded at least 11 civilians, according to an offi- cial statement from the Interior Min- istry.

Osama al-Soghayar, security chief for the military’s removal of Morsi, its ally, denounced the attack. But Egypti- ans had grown accustomed to any political situation. Since the military coup, the political system has restructured around a president, a parliament and others lost legs or other limbs.

ministers, analyst says the question So far, the rules have been ap- plied only to flights within Europe, and European carriers and most the United States and other countries rejected, would have imposed charges for emissions from flights to and from other countries, which some analysts believe the coalition has been a long shot. The United States and other countries have supported the ar- rangement, according to Europe- an diplomats.

The European law, which came into force on Jan. 1, 2012, covers emissions for flights shorter than 500 miles, but touch down in, or take off from, European airports, and obliging for- mation of the sentence went unanswered Thursday.

The United States and other countries have supported the ar- rangement, according to Europe- an diplomats.

The European law, which came into force on Jan. 1, 2012, covers emissions for flights shorter than 500 miles, but touch down in, or take off from, European airports, and obliging for- mation of the sentence went unanswered Thursday.

The United States and other countries have supported the ar- rangement, according to Europe- an diplomats.

The European law, which came into force on Jan. 1, 2012, covers emissions for flights shorter than 500 miles, but touch down in, or take off from, European airports, and obliging for- mation of the sentence went unanswered Thursday.
The US should not intervene in Syria

A police action would only lead to a power vacuum

By Michael Denigris

Most, if not all, Americans are at least vaguely aware of the cruel and miserable war taking place in the streets and coun-
tryside of Syria. Over the last two years, the Assad regime has clashed with a het-
terogeneous rebel group known as the Free Syrian Army (FSA) and other oppositional entities, most significantly the Al-Nusra Front — a radical Islamist group with ties to Al-Qaeda. Recently, President Obama announced that he would leave the deci-
dion of whether or not to engage the U.S. military against the Assad regime up to Congress, an action that has sparked a national debate over the use of U.S. interventionist foreign policy in the case of this conflict.

While the implacable and oppressive actions of the Assad regime, which include the senseless murder of civilians and sus-
ppected deployment of chemical weapons, seem to provide a significant reason for the U.S. to intervene, there are myriad reasons why doing so would be in direct conflict with American interests and only serve to amplify the chaos. The horrific externali-

ties of a misguided attempt to thrust its blood-stained glove into the ring would be substantial, which is why this issue doesn’t boil down to the simplistic and near-sighted view espoused by politicians in which the immediate safety of civilians is prioritized over all else.

Ironically, intervening may actually be a viable strategy when the move-
ment against Assad was in its infancy and the death toll was in the quadruple-digits. The initial opposition began in response to outrages for secular political and eco-

nomic reforms, with the original reform-

ers seeking to overthrow Assad and lib-
eralize the nation, a movement that the U.S. could have proudly stood behind. Unfortunately, the Free Syrian Army has since created radical links to its ranks due to funds, weapons, and manpower. As a result of this lack of resources, the FSA now consists of ideolo-
gical factions which compete for control of the movement, and therefore divide it. These new factions seek to institute Salaf-

ist politics into the Syrian government, and to establish a more religiously-auto-

cratic system of governance after Assad is removed from power. The presence of these radicals in the FSA makes it clear to even determine who the U.S. would be potentially aligning itself with, meaning that American soldiers would be sent into this battlefied essentially blind.

This issue doesn’t boil down to the simplistic and near-sighted view that the immediate safety of civilians should be prioritized over all else.

Ultimately, the U.S. has little to gain from an expanded military intervention in Syria. The Assad regime receives sig-
nificant backing from Russia and China — two nations that are extremely influential in the United Nations and in regard to our foreign policy — while, conversely, some of the radical groups affiliated with the rebel forces are strongly opposed to our ally, Israel. The potential for this conflict to escalate beyond the borders of Syria is thus real and a significant barrier to our military involvement. When one consid-
eres this geopolitical uncertainty, and the overwhelming evidence to suggest that this conflict will not end with Assad’s fall from power, it becomes clear that our at-
tempt to, yet again, police the world is indeed a dangerous one.

Michael Denigris is a member of the Class of 2017.
Somewhere on the Search for Meaning... by Letitia Li

Odd Jobs
by S.N. and Mike Nothnagel

Solution, page 12

ACROSS
66  Thwarted
1  Treats seawater, perhaps
8  Certain Grammy nominee
15  Look closely at
16  One getting away
17  WWII bigwig
20  Oscar winner as Elizabeth II
21  Uncool one
22  Animal friend
23  Pitfall
27  Shingle letters
28  Down for the count
31  Scolding sound
33  Soccer cheer
34  Conical dwelling
36  Serviceable
38  Boss at an adolescent mag
43  Literary device
44  Boston’s airport
45  Fiction course, for short
46  Nautical direction
49  Lo-mein cooker
50  Courtroom VIPs
53  Stay fresh
55  Monopoly quartet: Abbr.
57  Engrossed
58  Old Testament prophet
61  Shakespearean compilation
62  Casino staffer

DOWn
1  Presidential oath verb
2  Drove out
3  Frugal ones
4  Touch up
5  Simpson character
6  Blaster’s buy
7  Clothes line
8  Wish undone
9  Heads off
10  10Window insert.
11  Colleague feature
12  Lord’s Prayer opening
13  Largest US union
14  Harden
15  One-sided contest
16  Besides that
17  Look closely
18  Thwarted
19  Clothes line
20  Wish undone
21  Heads off
22  Touch up
23  Simpson character
24  Blaster’s buy
25  Colleague feature
26  Lord’s Prayer opening
27  10Window insert.
28  Largest US union
29  Harden
30  One-sided contest
31  Besides that
32  Look closely
33  10Window insert.
34  Colleague feature
35  Lord’s Prayer opening
36  Largest US union
37  Harden
38  One-sided contest
39  Besides that
40  Look closely
41  10Window insert.
42  Colleague feature
43  Lord’s Prayer opening
44  Largest US union
45  Harden
46  One-sided contest
47  Besides that
48  Look closely
49  10Window insert.
50  Colleague feature
51  Lord’s Prayer opening
52  Largest US union
53  Harden
54  One-sided contest
55  Besides that
56  Look closely
57  10Window insert.
58  Colleague feature
59  Lord’s Prayer opening
60  Largest US union
61  Harden
62  One-sided contest
63  Besides that
64  Look closely
65  10Window insert.
66  Colleague feature
67  Lord’s Prayer opening
68  Largest US union
69  Harden

Sudoku
Solution, page 12

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

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.

Techdoku
Solution, page 12

5x  15x
6x  10x
6x  10x
6x  10x

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.
Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun Fun

The Tech Friday, September 6, 2013
by Jorge Cham

Teaching Methods

The Socratic Method:
What can we say about this phenomenon?
Well, what are your assumptions?
And what do you base your reasoning on?

The Sarcastic Method:
Of course it went bad on the test, I just lectured about it for no reason!
I'd be happy to re-grade it. I love wasting my time!

www.phdcomics.com
A Webcomic of Romance, Sarcasm, Math, and Language
by Randall Munroe

[1260] LD50

The dose is much lower when administered orally. We're still trying to get the paper into the needles for subcutaneous injection.

[506] Theft of the Magi

Hey I sold your Roomba on Craigslist so I could buy myself Left 4 Dead.

But I eBayed your X-Box so I could get this Dueling Harness for my Roomba!

[682] Force

Force choking the chicken.

Techdoku II
Solution, page 12

Join The Tech’s Online Media department

We’re looking for students interested in:
- creating interactive data visualizations
- producing and editing video footage for the online platform
- developing The Tech's online presence via social media

What you’ll get from the experience:
- thousands of people every day will see your work online
- a portfolio of projects and clips that will impress a future employer
- the use of professional software for free

No experience necessary. We’ll teach you enough to hit the ground running.
Email join@tech.mit.edu for more info.

Copyright © 2013 Randall Munroe

“Every Pomegranate needs a dueling harness.”

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.

Every Roomba needs a dueling harness.
The beloved theme song of the Internet, "The Internet is for Porn," comes to MIT in the Musical Theater Guild's production of *Avenue Q*. With a story about a group of friends with real-life problems, such as closeted homosexuality, porn addiction, and graduating with a liberal arts degree, the show mixes puppets, actors, and even a shadow theater in a hilarious pastiche of *Sesame Street* for adults.

Although I have been dying to see the show for a while, I was skeptical that a cast of amateur puppeteers could implement the diverse range of emotions needed for the show without awkwardness. However, the Musical Theater Guild succeeds in bringing the characters to life, as they sing, drink, and have sex as loud as they want.

The story follows Princeton (puppeteered by Matthew S. Peairs '09), a liberal arts major who searches for his purpose while learning helpful life lessons. The rather predictable budding relationship between him and Kate Monster (puppeteered by Caroline B. Aronoff '15) is overshadowed by the vitriolic best buddies Nicky (puppeteered by David Wright and Holly Constant) and Rod (puppeteered by Andrew W. Koche '14), paralleling Bert and Ernie. The purple-furred Trekkie Monster, puppeteered by the team of Greg J. Lohman PhD '07 and Brett Popiel, is also a crowd-pleaser, as he insists that the Internet is for porn. Gary Coleman (Chamille J. Lescott '16) and Japanese Christmas Eve (Thao Nguyen) round out the ethnic stereotypes.

As an Asian-American, I was concerned that I would find Christmas Eve, a Japanese woman with a stereotypical r/l shift, offensive, but Nguyen accurately portrays the kind of Asian woman who would become a tiger mother, or at least a tiger wife. The casting of the puppeteers fits the characters so well that it is sometimes difficult to decide whether to pay attention to the puppet or the puppeteer, especially for the seductive Lucy the Slut (puppeteered by Madeline McCord). The Princeton puppet's gloomy look is initially a bit jarring against Peairs' beaming face, although his depressing expression becomes more appropriate in the second act.

Although agonizing over job prospects is perhaps more relevant for liberal arts graduates of the college up the road, everyone can find a moment they relate to in this musical. From relationship troubles, to dealing with homosexuality, or even to moping inside your room, it's better to laugh at your issues than to be depressed by them — and this production of *Avenue Q* does a good job of encouraging you to do just that.

*Avenue Q*

Directed by Dawn Erickson

MIT Musical Theater Guild

Aug. 30–31 at 8 p.m., Sept. 1 at 2 p.m., Sept. 5–7 at 8 p.m., Sept. 12–14 at 8 p.m.
Kresge Little Theater

**Theater Review**

A charming romp through the troubles of adult life

MIT Musical Theater Guild's *Avenue Q* gives you some comic perspective

By Deena Wang

*Staff Writer*

Avenue Q

Directed by Dawn Erickson

MIT Musical Theater Guild

Aug. 30–31 at 8 p.m., Sept. 1 at 2 p.m., Sept. 5–7 at 8 p.m., Sept. 12–14 at 8 p.m.
Kresge Little Theater

Christmas Eve (Thao Nguyen), and Kate Monster (Caroline B. Aronoff '15) in *Avenue Q*.

Rod (Andrew W. Koche '14), Nicky (Holly Constant and David Wright), Gary Coleman (Chamille Lescott '16), Christmas Eve (Thao Nguyen), and Brian (Josh Cough) in *Avenue Q*.

Fine dining. On The Tech.

Be a restaurant critic.

arts@tech.mit.edu
What your MITID can do for you
Exploring the artsy side of Boston

By Grace Young
and Angelique Nehmzow

Your MIT ID can get you free or heavily discounted admission to nearby arts venues. The Council for the Arts at MIT gifts these memberships and discounts as a way to great-
ens students’ exposure to and appreciation for the arts. The following is a list of the places where you can flash your card. In addition, you can use it to check out museum passes from Hayden Library for guests in town.

So, even if you’re excited about classes and all the activities taking place on campus, don’t forget the whole of Boston and Cambridge is right at our doorstep, and is well worth exploring!

Museum of Fine Arts (MFA)

If you only go to one place on this list, go to the MFA! Your MIT ID gets you in for free! The museum houses a fantastic permanent collection of drawings, paintings, photographs, sculptures, furniture, and more, dating from ancient Egypt to the present era, from all around the world. You won’t be able to see everything in one day, honestly, you could spend an entire year there.

The MFA also has well-curated temporary exhibitions, so there’s always something new to see, and they also offer film screenings, concerts, and lectures. As a bonus, there are three quaint cafes in the museum, perfect for meeting up with friends or catching up on a reading assignment.

Isabella Stewart Gardner Museum

Again, your MIT ID gets you in for free. This unique museum, built to emulate a 15th-century Venetian palace, hasn’t changed much since opening in 1903, at the dying request of its founder, art collector and philanthropist Isabella Stewart Gardner.

The “old” wing features paintings, sculptures, and tapestries from the Renaissance through early 20th century, while the “new” modern wing houses special exhibits and a cute restaurant. “Gardner After Hours” is a fun time to visit, when the museum stays open late and has events geared towards young adults.

Fun fact: the museum is infamous for a 1990 break-in, where thieves disguised as po-
lice officers stole thirteen paintings.

Institute of Contemporary Art (ICA)

You’ll get in free! You should expect to see some bizarre works at this place, but it’s worth a visit for those who can handle modern art. The museum has a performance center with windows overlooking the harbor — so even if a performance is a bit “out-there,” you can appreciate the view.

Boston Symphony Orchestra (BSO)

This one isn’t free, but the fee is more like a token of appreciation. For just $5 you can get tickets to as many BSO performances as you want! First, you need to buy the BSO Collage Card, which is valid for the year, and which is available at the BSO Ticket Office, and at MIT Copyshop in the basement of Building 42 (1-003). Then, pick up your ticket from the box office the week of the performance you want to see. Beware, some performances won’t let you use the Collage Card, but most do. Also, the card will only get you one ticket — if you want to go with a friend and get seats together you have to go pick up tickets together.

Generally, it’s a good idea to call before venturing to the box office (at 301 Mass. Ave., Boston, a short walk over the bridge), because sometimes they sell out of the tickets reserved for Collage Card holders.

Photographic Resource Center

This is an independent non-profit orga-

nization at Boston University, and — you guessed it — MIT students can get in for free. It showcases a new photography exhibit every few months. The current exhibit is on the identity and photographic portrait. MIT students are also eligible to participate in their annual exhibition.

The exterior of the Art of the Americas Wing was designed by Charles Moore.

Harvard Art Museum

The museum is fantastic, but closed until fall 2014 for renovations.

Radius Ensemble

The ensemble puts on an eclectic concert about twice a semester in Harvard Square, and MIT students can get free tickets. On Oct. 5, they will play a mix of pieces for flute, oboe, viola, cells, harp, clarinet, and cello. On Nov. 23, the ensemble will be playing Czech classical music fusion and jazz-classical fusion.

The Catalyst Collaborative at the Central Square Theater

MIT students get discounted tickets to performances by the collaborative, which aims to present science to the public through the theater. Their next show, Silia, on show in April and May, is about a climatologist, an Inuit activist, and two polar bears struggling to adapt to the rapidly changing environment.

Boston Chamber Music Society (BCM)

MIT students get free or discounted tick-

ets to BCMs performances. BCMs performs classical masterpieces, either at the Sanders Theatre on Sunday nights in Harvard Square, or at MIT’s Kresge Auditorium in December and January.

Boston Modern Orchestra Project (BMOP)

This group performs exclusively new music, but is otherwise fairly mysterious. They will have performances this November, January, and May, but further details on the group and tickets haven’t been released yet.

The MIT Museum

Last but not least, your MIT ID gives you access to MIT’s own museum, which is just up Mass. Ave. The MIT Museum houses interesting exhibitions about MIT’s history and ongoing research, particularly related to artificial intelligence, and has an awesome collection holograms and kinetic sculptures. Its temporary exhibits tend towards the robotic, technological, and photographic. The next exhibit is Stanley Greenberg: TIME Machines, which opens on Sept. 13.

MIT is Stressful

But don’t settle for the sugary drinks at La Verde’s. Get a healthy Energy Drink that works, and payouts just for telling your friends about it.

- Possibility to get free energy drinks
- Help out other aspiring MIT students
- Get your car paid for
- Get the vitamins your everyday food lacks
- And More!

To get free energy drinks or for more information and to join the team: Contact: danieljs@mit.edu
danielmit.vemma.com

Be an eNGineer

The Tech is looking for enthusiastic students to join our new video team.

We’re looking for:
- Video editors
- Broadcast reporters
- Videographers

No experience necessary.

MIT students, are you interested in video editing and production? The Tech is looking for enthusiastic students to join our new video team. We’re looking for video editors, broadcast reporters, and videographers. No experience necessary. To get free energy drinks or for more information and to join the team: Contact danieljs@mit.edu or visit danielmit.vemma.com

Be a different kind of ENGineer
EXHIBIT REVIEW

An ethereal silken globe
The Silk Pavilion of the Mediated Matter group at the MIT Media Lab

By Kristen Sunter

The Silk Pavilion is a gauzy hemisphere of sparse silk threads, with apertures arranged in an asymmetric but balanced pattern and many small, dense, circular patches of silk filaments that were spun directly onto it by live silkworms. The scaffold is composed of several panels with irregular patterns of silk thread to support the silk spun by Bombyx mori, the most widely cultivated species of silkworm. Suspended in the lobby of the Media Lab (E14) until the middle or end of September, the Silk Pavilion was made by the Media Lab’s Mediated Matter group, consisting of Markus Kayser, Jared Laucks, Carlos David Gonzales Uribe, and Jorge Duró-Royo and led by Dr. Neri Oxman. The project was developed in collaboration with Professor Piero Omontesotti (Tulsa University) and Dr. James Weaver (Wyss Institute for Biologically Inspired Engineering at Harvard University).

To build the Silk Pavilion, 6500 silkworms were placed at the bottom of the thread scaffold, which was laid out by a computer-numerically controlled (CNC) machine and assembled in the lobby of E14, where it is now on display. The silkworms were placed on the scaffold over a ten-day period, during which each silkworm spun for three days, which is their normal spinning behavior. The silkworms did not create cocoons, but rather locally reinforced the gaps in the scaffold with their non-woven silk structure.

The trajectories of the silkworms were affected by the layout of the threads and possibly by the variation in natural light and heat, which led them to move from the lower edge where they were placed towards the top of the dome. The holes in the dome were positioned to capture sunlight from the east and south and allowed the limits of the ability of silkworms to cover holes to be tested. The result is a dome of sparse, thicker threads that appear to be lightly covered with patches of silk filaments of varying density.

The research behind the Silk Pavilion began in September 2012 with several small experiments on silkworm spinning behavior, to determine whether the silkworms optimized their spin structure to follow lines of tension, and to study the geometry and reach of their silk. The results of these platform spinning experiments can be seen on display to the south of the Silk Pavilion, and were considered when the final scaffold of the Silk Pavilion was modeled. The development of the final project began in February 2013, and the scaffolding, CNC weaving, assembly, and silkworm placement lasted until early April.

Although the Silk Pavilion was initially meant to explore the possibility of fiber-based construction on a large scale, other aspects of the research became apparent. For example, silk production does not currently allow the use of the silk worm/moth lifecycle — the pupae are killed when their cocoons are immersed in hot water to free the silk filaments. However, the silkworms that spun the Silk Pavilion were allowed to pupate, and the pupae could be removed without killing them.

The Silk Pavilion is not the first work of art to rely on insects for construction. Steven Kutcher, an entomologist who once created a series of paintings with insects such as bees walking on paper with paint on their legs. Earlier, in the 1980’s, French artist Hubert Duprat used caddisfly larvae to create jewelry-like art. Caddisfly larvae naturally use materials found in their habitat, such as pieces of wood, to construct protective tubes around themselves. Duprat placed caddisfly larvae in tanks with flakes of gold and precious and semiprecious stones with which they created ornate gold tubes.

The silkworm research will continue with further experiments. “We are always looking at new or different biological systems that we might be able to work together with as more collaborative process as science and technology are merging,” said Jared Laucks G, a member of the Mediated Matter group. Future research in the Mediated Matter group will also focus on “swarm printing.”
Following a tumultuous career and large debts, David Blech convicted of securities fraud

Blech was merely an aggressive stock promoter who got lucky. They note that Cekjene and Alexion did not become successful until long after Blech was associated with them.

The three came up with a name — Genetic Systems. Then they had to figure out what the company would actually do. An article in a science magazine led them to Robert Nowinski at the Fred Hutchinson Cancer Research Center in Seattle, who was doing research on a new technology involving something called monoclonal antibodies.

The Blechs promised Nowinski $200,000 and then raised $3 million from others. Half a year later, Genetic Systems went public and the Bleches' stake was worth $30 million. In 1986, Bristol-Myers Squibb acquired Genetic Systems for nearly $300 million, and the Bleches were richer still.

Once again he asked for mercy, but "David and Isaac Blech went on to ..." the three came up with a name — Genetic Systems. Then they had to figure out what the company would actually do. An article in a science magazine led them to Robert Nowinski at the Fred Hutchinson Cancer Research Center in Seattle, who was doing research on a new technology involving something called monoclonal antibodies.

The Blechs promised Nowinski $200,000 and then raised $3 million from others. Half a year later, Genetic Systems went public and the Bleches' stake was worth $30 million. In 1986, Bristol-Myers Squibb acquired Genetic Systems for nearly $300 million, and the Bleches were richer still.

But "David just wrote me a check for $3 million the same day I went to see him." That allowed Liposome to survive and develop Dexal, an important cancer drug.

"It's a sad story," Collinson said. "It's also an unlikely story. In 1980, Blech was working as a stockbroker while trying to become a songwriter. That fall, biotechnology pioneer Genentech went public and the company's stock price doubled the first day. "I can do that," Blech, then only 24, told his father, a table who was also a stockbroker. Blech then called his brother, Isaac, who was working in advertising, and said, "Quit your job, we're starting a genetics company."

Sitting around the kitchen table, each course has its own programs and different gradu-ates. The Degree Shank is a unique feature of the GradRat; the ring serves students enrolled in differ-ent programs and different gradu-ation years. Each course has its own feature of the GradRat; the ring serves students enrolled in different programs and different graduation years. Each course has its own program and different graduates.

Many graduate students considered 'IHTFP' too 'undergrad' to be on the GradRat.

But instead of going to prison, Blech was sentenced to five years probation because of his bipolar disorder and his cooperation with the government.

The $15 million in trusts for his children no longer went so far. Companies did not want financing from a felon.

"God forbid you should ever come back to this courtroom," Judge Kevin T. Duffy said at the sen-tencing in 1999. Blech "solemnly pledged" that he would not.

By the time his probation ended, his old formula would not work. The $15 million or so he had sheltered in trusts for his children no longer went so far. Startups could no longer go public just because they had "genetic" in their names. And companies did not want finan-cing from a felon.

So Blech turned to hard-pressed penny stock companies. Government investigators bought some of the thinly traded stock would cause the price to collapse.

But instead of going to prison, Blech was sentenced to five years probation because of his bipolar disorder and his cooperation with the government.

The $15 million in trusts for his children no longer went so far. Companies did not want financing from a felon.

"I didn't know how to say no to a deal," he said. Critics over the years have said that Blech has essentially not talked since. In 2012, Blech pleaded guilty to manipulating stock of two biotech companies as part of his comeback attempt.

Besides what his downfall means for the biotechnology industry from its get-rich-quick days, when someone like Blech, a music major with no scientific training, could make a difference with a few million dollars. Now billions are in vested by funds managed by teams of doctors and scientists.

The Degree Shank is a unique feature of the GradRat; the ring serves students enrolled in different programs and different graduation years. Each course has its own program and different graduates. The Degree Shank is a unique feature of the GradRat; the ring serves students enrolled in different programs and different graduation years. Each course has its own program and different graduates.

"I can do that," Blech, then only 24, told his father, a table who was also a stockbroker. Blech then called his brother, Isaac, who was working in advertising, and said, "Quit your job, we're starting a genetics company."

Sitting around the kitchen table, each course has its own programs and different gradu-ates. The Degree Shank is a unique feature of the GradRat; the ring serves students enrolled in different programs and different graduation years. Each course has its own feature of the GradRat; the ring serves students enrolled in different programs and different graduation years. Each course has its own program and different graduates.
Fossil fuels are the new tobacco: a divestment focus
Push renewed for college endowments to divest themselves of holdings in oil companies

By Randall Smith
The New York Times

In the 1980s, it was South Africa. In the 1990s, it was tobacco.

Now fossil fuels have become the focus of those who would change the world through the power of investing.

A student movement has gathered momentum at more than 300 campuses over the past year. Members have encouraged college and university endowments to divest themselves of their holdings of companies in the fossil fuel business to avoid profiting from the release of carbon emitted with the risk of global warming.

While the efforts have gained some traction, they have also met strong opposition from critics who favor the status quo proxy voting process of engagement, in which institutional investors try to prod corporations to change their practices, with divestiture a last resort.

The push also comes as some big institutional investors are paying more attention to broader environmental, social and corporate governance issues.

For example, the California Public Employees’ Retirement System has a sprawling program that includes 13 initiatives. These include proxy voting, investing in funds devoted to green energy or to urban agriculture, and a program known as "underexposed" by investment capital, and an annual list of underperforming companies. CalPERS is working to integrate such issues throughout its $254 billion fund, including research to determine how such factors affect risk and return.

In July, Harvard’s endowment, the nation’s largest at $31 billion, faced criticism from the fossil fuel divestment movement. [Redacted] (a proxy voting firm) estimated the costs of rebalancing the endowment’s portfolio to avoid fossil fuels. The cost was $14.5 million to sell stocks from the endowment’s fossil fuel holdings.

At a meeting in April, Nannerl O. Keohane, two members of Divest Harvard met in February, for example, the California Public Employees’ Retirement System has a sprawling program that includes 13 initiatives. These include proxy voting, investing in funds devoted to green energy or to urban agriculture, and a program known as "underexposed" by investment capital, and an annual list of underperforming companies.

CalPERS is working to integrate such issues throughout its $254 billion fund, including research to determine how such factors affect risk and return.

In July, Harvard’s endowment, the nation’s largest at $31 billion, faced criticism from the fossil fuel divestment movement. [Redacted] (a proxy voting firm) estimated the costs of rebalancing the endowment’s portfolio to avoid fossil fuels. The cost was $14.5 million to sell stocks from the endowment’s fossil fuel holdings.

At a meeting in April, Nannerl O. Keohane, two members of Divest Harvard met in February, for example, the California Public Employees’ Retirement System has a sprawling program that includes 13 initiatives. These include proxy voting, investing in funds devoted to green energy or to urban agriculture, and a program known as "underexposed" by investment capital, and an annual list of underperforming companies.

CalPERS is working to integrate such issues throughout its $254 billion fund, including research to determine how such factors affect risk and return.

In July, Harvard’s endowment, the nation’s largest at $31 billion, faced criticism from the fossil fuel divestment movement. [Redacted] (a proxy voting firm) estimated the costs of rebalancing the endowment’s portfolio to avoid fossil fuels. The cost was $14.5 million to sell stocks from the endowment’s fossil fuel holdings.

At a meeting in April, Nannerl O. Keohane, two members of Divest Harvard met in February, for example, the California Public Employees’ Retirement System has a sprawling program that includes 13 initiatives. These include proxy voting, investing in funds devoted to green energy or to urban agriculture, and a program known as "underexposed" by investment capital, and an annual list of underperforming companies.

CalPERS is working to integrate such issues throughout its $254 billion fund, including research to determine how such factors affect risk and return.

In July, Harvard’s endowment, the nation’s largest at $31 billion, faced criticism from the fossil fuel divestment movement. [Redacted] (a proxy voting firm) estimated the costs of rebalancing the endowment’s portfolio to avoid fossil fuels. The cost was $14.5 million to sell stocks from the endowment’s fossil fuel holdings.

At a meeting in April, Nannerl O. Keohane, two members of Divest Harvard met in February, for example, the California Public Employees’ Retirement System has a sprawling program that includes 13 initiatives. These include proxy voting, investing in funds devoted to green energy or to urban agriculture, and a program known as "underexposed" by investment capital, and an annual list of underperforming companies.

CalPERS is working to integrate such issues throughout its $254 billion fund, including research to determine how such factors affect risk and return.

In July, Harvard’s endowment, the nation’s largest at $31 billion, faced criticism from the fossil fuel divestment movement. [Redacted] (a proxy voting firm) estimated the costs of rebalancing the endowment’s portfolio to avoid fossil fuels. The cost was $14.5 million to sell stocks from the endowment’s fossil fuel holdings.

At a meeting in April, Nannerl O. Keohane, two members of Divest Harvard met in February, for example, the California Public Employees’ Retirement System has a sprawling program that includes 13 initiatives. These include proxy voting, investing in funds devoted to green energy or to urban agriculture, and a program known as "underexposed" by investment capital, and an annual list of underperforming companies.

CalPERS is working to integrate such issues throughout its $254 billion fund, including research to determine how such factors affect risk and return.

In July, Harvard’s endowment, the nation’s largest at $31 billion, faced criticism from the fossil fuel divestment movement. [Redacted] (a proxy voting firm) estimated the costs of rebalancing the endowment’s portfolio to avoid fossil fuels. The cost was $14.5 million to sell stocks from the endowment’s fossil fuel holdings.

At a meeting in April, Nannerl O. Keohane, two members of Divest Harvard met in February, for example, the California Public Employees’ Retirement System has a sprawling program that includes 13 initiatives. These include proxy voting, investing in funds devoted to green energy or to urban agriculture, and a program known as "underexposed" by investment capital, and an annual list of underperforming companies.

CalPERS is working to integrate such issues throughout its $254 billion fund, including research to determine how such factors affect risk and return.
STILL THIRSTY?

By adding 2 or 3 subjects to your required HASS Concentration, you can build a 6-subject minor that allows you to explore your field of choice in greater depth. Each year hundreds of MIT students decide to minor in the Humanities, Arts, and Social Sciences.

Minor in one of 30 HASS fields.

- Art, Culture, & Technology
- Ancient & Medieval Studies
- Anthropology
- Applied International Studies
- Comparative Media Studies
- Economics
- Foreign Languages
- Chinese
- French
- German
- Japanese
- Spanish
- History
- History of Architecture & Art
- International Development
- Linguistics
- Literature
- Music
- Philosophy
- Political Science
- Public Policy
- Regional Studies
  - African & African Diaspora
  - Asian & Asian Diaspora
  - Latin American & Latino
  - Middle Eastern
  - Russian & Eurasian
- Science, Technology, and Society
- Theater Arts
- Urban Studies & Planning
- Women's & Gender Studies
- Writing

SPERM DONORS

Earn up to $1200 per month

- Invest minimal time
- Make a real difference in the lives of families
- Receive free health and genetic screenings

APPLY ONLINE:
SPERMBANK.com
- Convenient Cambridge location

Solution to Crossword

Solution to Sudoku

Solution to Techdoku

Solution to Techdoku II

SPERM DONORS

Earn up to $1200 per month

- Invest minimal time
- Make a real difference in the lives of families
- Receive free health and genetic screenings

APPLY ONLINE:
SPERMBANK.com
- Convenient Cambridge location
T-SHIRTS
...a necessary fact of college!

• Deal direct...no middlemen
• Fast turnaround
• Award winning & computer literate art dept.
• Free delivery & reasonable pricing
• Full color t-shirts and coffee mugs - no minimum!
• Locally owned & operated in Somerville, MA.

...and best of all - no boring lectures

Got Something to Say?

Now you can!
Introducing comments
on The Tech’s website
Make your voice heard

MIT MOTORSPORTS
Formula SAE Electric

What: Open House Info session with pizza.
No commitment, we just want to tell you more about our team and how joining can help you get the experience you can’t get in a classroom.

Who: You! All are welcome, no prior experience with awesome race cars required. We'll teach you everything you need to know!

When: Saturday September 7th @ 3pm.

Where: N51-145. Behind the MIT Museum, enter through the glass door to the right of the main Museum entrance.

Why: Because race car.

swartz, from page 1
working on a bill known as Aaron’s Law aimed at reforming the CFAA.
Should MIT strengthen its activities in support of open access to scholarly publications? It is not known what Swartz intended to do with the millions of journal articles he downloaded, but he was a consistent advocate of open access.
What are MIT’s obligations to members of our extended community? Aaron Swartz had previously worked at the World Wide Web Consortium, and his father is affiliated with the MIT Media Lab. However, Swartz was not an MIT student, which was one reason MIT did not take a public position on the Swartz case, according to the report.
How can MIT draw lessons for its hacker culture from this experience? The report’s authors ask whether “a change in the institutional climate” and “a concern for minimizing risk” bode ill for the “culture of creative disobedience.”
The turnout to the announced gatherings will tell whether the report’s picture of apathy on the part of MIT students towards the Swartz case has changed.
“I would like to make sure that all of us have a much better understanding of what transpired,” Reif told The Tech in August. “We’re dealing with a situation that involves not just creativity, innovation, but also intellectual property and the rule of law. That’s a very important conversation to have right now.”

—Leon Lin

ph - 617-625-3335
e-mail - info@qrsts.com
wwwqrsts.com
serving the M.I.T. Community since 1989
Benfica and PSG expected to easily lead Group C

Champions League, from Page 16 to Borussia Dortmund, which may make it difficult to come out on top.

German teams on club and international level are always top contenders because they have the tactics, structural organization and discipline needed to succeed. Bayer Leverkusen is one such Ger-

man team and should definitely be feared. However, I still do not think that they have what it takes to advance to the next round.

The last team of the group is the San Sebastian based Real So-

ciad. Some of you may be sur-

prised when you hear the name, but because it has been a long time since Real Sociedad has been to the European stage. However, their two wins over French side Olympique Lyonnais showed that they are no push overs, and they boasted some unbelievable goals.

Even so, this squad is still quite young and lacks the experience needed to succeed. I am sure they will bring an explosion to the group stage but advancing is another thing. Even if they fail to advance, I believe they will be back in the

story. Even if they fail to advance, the group, but advancing is another

thing. Of course, there will be a period in which the team will get accustomed to Pep’s tactics, but CSKA and Viktoria will not be able to take full advantage of that moment. They will likely start off doing well, but end up going to the UEFA Europa League, just like BATE Borisov did last year.

The last team of the group is CSKA Moscow, Manchester City, Viktoria Plzen.

Group D will see last year’s champions pitted against Man-

chester City. The two teams should be happy with the draw as CSKA Moscow and Viktoria Plzen are not up to their caliber and it would take something close to a miracle to not have Bayern and City advan
to the next round. Bayern Munich played exemplary soccer last year, and they now have Pep Guardiola to guide the team further. Of course, there will be a number of matches in which the team will get accustomed to Pep’s tactics, but CSKA and Viktoria will not be able to take full advantage of that moment. They will likely start off doing well, but end up going to the UEFA Europa League, just like BATE Borisov did last year. City’s manager change will also reflect positively on the team and Pellegri will have his side advance to the next round.

Olympiacos and Anderlecht will not be able to make a run for second place in the group, but CSKA and Viktoria will not be able to make a run for second place in the group, Benfica and PSG will rise above their opponents, while Olympiacos and Anderlecht will be fighting for the third spot in the group. Benfica had a heart-

breaking and dramatic season last year by losing the league, the cup, and the UEFA Europa League with goals conceded in the 90+ minutes. They’ll be looking to make up for their losses with talented squad. PSG is the high-

roller and their summer acquisi-
tions make a run for second place in the group, but maintaining third seems almost guaranteed. The fact that they have a strong presen-
tion (beating Arsenal, Porto and tying with Napoli and Malaga) shows that they are ready for more Euro-

pean football.

Copenhagen was unlucky to draw such a group. Their chances of making an impact seem quite low, especially considering their recent poor performance in the Danish League. They’ll need to find some momentum to face off against Juventus, Real Madrid and Galatasaray.

Real Madrid and Juventus will pass onto the next round with Galatasaray close behind them in third and Copenhagen will be left in fourth place.

Group C, Benfica, Paris Saint-

Germain, Olympiacos, Anderlecht Another fairly straightforward group, Benfica and PSG will rise above their opponents, while Olympiacos and Anderlecht will be future to the next round. Paris Saint Germain have all the makings of champions, and they could have advanced to the finals last year if they hadn’t run into Bayern Mu-

nich in the quarterfinals. Whether it is the quality of their goalkeeper (Buffon), defenders (Lichtsteiner-

e, Belanger, Bonucci, Chiellini), midfielders (Patello, Vidal, Pogba) or forwards (Lorenzo, Tevez, Vacmic, Oasguiaurelli), Juventus will be a

force to be reckoned with later on in the competition as well.

Galatasaray has re-emerged onto the European stage with players such as Dogru, Stini-
dger, Chedjou, Burak, Selcuok and Mudar. They managed to make it to the quarterfinals last year, only to be eliminated by Real Ma-

drid. If they’ve learned anything from those matches, they may still make a run for second place in the group, but maintaining third seems almost guaranteed. The fact that they have a strong presen-
tion (beating Arsenal, Porto and tying with Napoli and Malaga) shows that they are ready for more Euro-

pean football.

Copenhagen was unlucky to draw such a group. Their chances of making an impact seem quite low, especially considering their recent poor performance in the Danish League. They’ll need to find some momentum to face off against Juventus, Real Madrid and Galatasaray.

Benfica have all the makings of champions, and they could have advanced to the finals last year if they hadn’t run into Bayern Mu-

nich in the quarterfinals. Whether it is the quality of their goalkeeper (Buffon), defenders (Lichtsteiner-

e, Belanger, Bonucci, Chiellini), midfielders (Patello, Vidal, Pogba) or forwards (Lorenzo, Tevez, Vacmic, Oasguiaurelli), Juventus will be a

force to be reckoned with later on in the competition as well.

Galatasaray has re-emerged onto the European stage with players such as Dogru, Stini-
dger, Chedjou, Burak, Selcuok and Mudar. They managed to make it to the quarterfinals last year, only to be eliminated by Real Ma-

drid. If they’ve learned anything from those matches, they may still make a run for second place in the group, but maintaining third seems almost guaranteed. The fact that they have a strong presen-
tion (beating Arsenal, Porto and tying with Napoli and Malaga) shows that they are ready for more Euro-

pean football.

Copenhagen was unlucky to draw such a group. Their chances of making an impact seem quite low, especially considering their recent poor performance in the Danish League. They’ll need to find some momentum to face off against Juventus, Real Madrid and Galatasaray.

Real Madrid and Juventus will pass onto the next round with Galatasaray close behind them in third and Copenhagen will be left in fourth place.

Group C, Benfica, Paris Saint-

Germain, Olympiacos, Anderlecht Another fairly straightforward group, Benfica and PSG will rise above their opponents, while Olympiacos and Anderlecht will be future to the next round. Paris Saint Germain have all the makings of champions, and they could have advanced to the finals last year if they hadn’t run into Bayern Mu-

nich in the quarterfinals. Whether it is the quality of their goalkeeper (Buffon), defenders (Lichtsteiner-

e, Belanger, Bonucci, Chiellini), midfielders (Patello, Vidal, Pogba) or forwards (Lorenzo, Tevez, Vacmic, Oasguiaurelli), Juventus will be a

force to be reckoned with later on in the competition as well.

Galatasaray has re-emerged onto the European stage with players such as Dogru, Stini-
dger, Chedjou, Burak, Selcuok and Mudar. They managed to make it to the quarterfinals last year, only to be eliminated by Real Ma-

drid. If they’ve learned anything from those matches, they may still make a run for second place in the group, but maintaining third seems almost guaranteed. The fact that they have a strong presen-
tion (beating Arsenal, Porto and tying with Napoli and Malaga) shows that they are ready for more Euro-

pean football.

Copenhagen was unlucky to draw such a group. Their chances of making an impact seem quite low, especially considering their recent poor performance in the Danish League. They’ll need to find some momentum to face off against Juventus, Real Madrid and Galatasaray.
September brings premieres of the CL soccer tournament.

Manchester United, Real Madrid expected to lead in their groups

By Ali Soylemezoglu

On August 29, 2013, the 2013-2014 Champions League (CL) Groups were drawn. The CL soccer tournament will premiere in two weeks, on September 17 and 18, which is plenty of time to get acquainted with the groups and teams competing. The Tech’s Ali Soylemezoglu presents an in-depth analysis of the first four groups competing in the prestigious club soccer tournament. Look back next week for the verdict on the final four groups.

Group A

Manchester United, Shakhtar Donetsk, Bayer Leverkusen, and CSKA Moskva

On paper, Manchester United seems like they will be in control in this group, but soccer is not won on paper and what teams put forward on the pitch is what truly matters. Manchester United has the same skilled group of players, but this time one major change; they are missing their previous manager Sir Alex Ferguson. As far as I have been watching soccer, I have never seen a Champions League season without Sir Alex, so this will be a massive change for soccer-lovers all over the world. It waits to be seen if his replacement, David Moyes of Everton, has what it takes to manage the giant that is Manchester United. His results so far were unable to bolster confidence, as he tied at home against Chelsea and lost to Liverpool away, leaving fans hoping that the new manager just needs time to grow accustomed to his team. However, with Champions League soccer just around the corner, he needs to have his side produce goals and victories immediately.

Shakhtar Donetsk had a good run last year, only to be eliminated by Bayern Munich. Olympiacos in the round of 16. The manager of the Romanian side, Mircea Lucescu, is the manager and I’m sure his team will be looking to advance to the next round, perhaps even as group leaders. I would say that they have the manager and talent necessary. However, the team has lost some important players as Fernandes and Mikel moved to Manchester City. Wil- liam to Chelsea and Mihaitian

Champions League, Page 15

UPCOMING HOME EVENTS

Saturday, September 6

Women’s soccer vs. Emmanuel College

Women’s tennis vs. Emerson College

Men’s soccer vs. Wentworth Institute of Technology

MIT beats Worcester State in women’s soccer matchup

Rodriguez scores two, propelling the Engineers

By Charlotte Brackett

After scoring the lone goal of the game against Simmons College the night before, Michelle Rodriguez ’14 scored both of MIT’s goals against Worcester State University to lead the Engineers to a 2-0 win over the Lancers at home on Tuesday evening. MIT is now 2-1 for the season, while Worcester State fell to 1-1.

Worcester State started the first half off very strongly by scoring its first goal just 11 minutes into the game. The goal was made at the foot of Shelby Archer, who shot the ball from the right corner of the field, firing it clear over the head and out-stretched arms of goalkeeper Lauren S. Ullmann ’17. The Engineers wasted no time evening the score, however, at 16:23.

Conor Dooley ’17 and Andrew Mandelbaum G,很有可能是错误的。 13

Rodriguez received a pass from Ambika Krishnamurthi ’15 and pocketed the ball in the back of the net, tying the score at 1-1. Just five minutes later, Rodrigo

scored the ball from the oppo sing team’s keeper and shot it at the goal, hitting the post with such power that it rolled into the net before the keeper could knock it free, giving the Engineers the 2-1 lead that they would hold onto for the remain der of the game. MIT took seven more shots at net throughout the remaining 30 minute half, with three of them being saved by keeper Illian Wikoveski. It looked as if MIT might score its third goal of the night at the 36 minute mark when Emma Okouwa ’16 swept the ball up and fired it at the keeper, who knocked the ball out of harm’s way with the tip of her fingers.

The Engineers turned up the intensity in the second half, firing 19 shots at goal through out the entire second half, 13 of which were saved by the goalie. Worcester State was able to break through MIT defense a handful of times, but were thwarted each time by goalkeep er Tamar N. Welsey ’16 during her stint in the net. With neither team able to get close enough to the opposing goal, the game ended with an MIT victory.

MIT outlet Worcester State 3-1. Ullmann and Welsey each spent 45 minutes in net, with Ullmann making two saves and allowing one goal and Welsey making three saves. Wikoveski made an impressive 19 saves throughout the entire game.

The Engineers will host their second of three consecutive home games on Saturday, Sept. 7, facing Emmanuel College at 11:00 a.m.

MIT club sports teams rocked the 2013 season

Numerous teams traveled to national championship tournaments this past year

By Sarah Woir

People don’t generally think of MIT as an athletic powerhouse. What they don’t know is that in addition to 33 varsity sports, MIT has 35 club sports teams — and they’re really good. Last season, many club teams made it to the national championships in their sports, and individuals from each team excelled. Here are last sea son’s highlights from some of MIT’s club sports teams.

In addition to 33 varsity sports, MIT has 35 club sports teams — and they’re really good.

Table Tennis

This past season, the Table Tennis club competed in three open tournaments. Additionally, Alex C. Wang ’14 made a spot at singles qualifier in the National Championships.

Women’s Rugby

The Women’s Rugby team won the Beantown Division II Tournament and attended the New England Wide Collegiate Rugby Competition Regional Championships. They fell to third-ranked Harvard University, but ended the season with the fewest points scored against them during the regular season.

Cycling

The Cycling team was named USA Cycling’s Collegiate Club of the Year in 2012, and completed their 2012-2013 season by taking first place in both the Division II Track and Road National Championships.

Cheerleading

The MIT Cheerleading squad took fourth place at the National Cheerleading Association championship in Daytona, Florida. This was the team’s first appearance at the national competition, commendable seeing as they only began learning routine choreography over IAP.

Wrestling

The Wrestling team sent six athletes to the National Collegiate Wrestling Association Division II National Championship in 2013. The team took first place at the event. Ryan J. Madson ’13 was named an All-American for the fourth time and also set the MIT record with 145 career wins.

Sport Taekwondo

The Sport Taekwondo team attended the National Collegiate Taekwondo Competition this past year and ended up winning second place overall and third in the black belt division. Michelle W. Chen ’14, Erika Lee ’13, and Hilary Monaco ’12 earned a gold medal in the female team triple win. Andrew Mandelbaum B, Daniel Stallworth ’14, and Seth Matthew Weinberg G took the bronze medal in the men’s tri ple division. Additionally, the team finished second place in the Eastern Collegiate Taekwondo Conference behind Cornell University.