

Industrial Blueprint

-The IOE Student Newsletter-

Volume 19, Issue No. 4

A joint venture from APM and IIE

December 2005

Last Day for Advising: Tuesday, December 13, 2005

Undergraduate Walk-In Counseling Hours

Professor Yili Liu (Program Advisor):

Wednesdays: 2-3:00pm & by appointment

In G622 IOE

E-mail: yililiu@umich.edu

Phone: 763-0464

Justina Chiang (IOE/EGL Peer Counselor):

Mondays: 3-4pm

Tuesdays: 11am-1:30pm

Wednesdays: 3-5pm

Fridays: 12:30-3pm

In 1749 IOE

E-mail: jlchiang@umich.edu

Kristen Neubauer (IOE/EGL Peer Counselor):

Mondays: 10am-3pm

Thursdays: 10am-2pm

In 1749 IOE

E-mail: kneubaue@umich.edu

Pedro Vaz (IOE/EGL Peer Counselor):

Tuesdays: 1:30-5pm

Thursdays: 2-5pm

In 1749 IOE

E-mail: pvaz@umich.edu

Pam Linderman (IOE Undergraduate Advisor):

In 1603 IOE

E-mail: plinder@umich.edu

Upcoming Events

December 22	Last Day of Finals
December 25	Christmas Day
January 1	New Year's Day
January 5	Winter Term 2006 Classes Begin

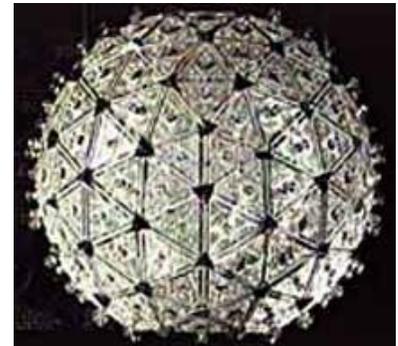
A Few Words From the Editor . . .

This is the last issue of the Blueprint of the 2005 year!!! Big props to everyone that sent in articles or overall helped out during this semester. This issue has been intentionally kept short and simple (you all have finals to study for I'm sure), probably a relief after last month's 12-page edition.

The December Blueprint features internship reviews (including a pretty fun one about toy engineering), movie reviews, and other general randomness, including comics (check the back page) contributed by a fellow IOE senior, David Steele. This is the first time we've ever gotten such an original input all year, so major props to David.

Please send feedback to us at IOEBlueprint-Group@umich.edu and let us know what you think about everything. Good luck on all your finals; everyone at the Blueprint staff hopes your holiday break is fantastic.

Have a nice day,
Franklin.



Visit the IOE Department Website:
<http://ioe.engin.umich.edu/degrees/ugrad/ugrad.html>

IOE Student Societies

Alpha Pi Mu (APM)

<http://www.engin.umich.edu/soc/apm>

Engineering Global Leadership (EGL) Honor Society

<http://www.engin.umich.edu/students/support/egl/>

Human Factors and Ergonomics Society (HFES)

<http://www.engin.umich.edu/soc/hfes>

Institute of Industrial Engineers (IIE)

<http://www.engin.umich.edu/soc/iie>

Institute for Operations Research & the Management Sciences

<http://www.engin.umich.edu/soc/informs>

Outstanding Multicultural Industrial Engineers (OMIE)

<http://www.engin.umich.edu/soc/omie/>



The IOE Building
(the front looks better than the back, don't you think?)

DVDs for the Holidays

By Alex Wang

It's Christmas/Chanukah/Kwanzaa time, which also means it's time to shell out money to buy gifts for your parents, your extended family, your friends, your girlfriend/boyfriend, your teachers (suck-up), your pets, and your Internet service provider (I hate Comcast). What better way to show your love and appreciation than to buy them a DVD?! Below are my picks for the holiday season; however, I must warn you that I didn't watch many movies this summer so I didn't have much to choose from. I didn't watch *Wedding Crashers*, I slept through *Batman Begins*, my *Monster-In-Law* download was in Spanish, and the ones I did watch really sucked, like *Madagascar*, *Fantastic Four*, and *Stealth*. Anyways, here are my picks:

Crash

The best movie I saw this year by far. People know I LOVE dramatic movies that are saturated with emotion and passion (like *Moulin Rouge*), and *Crash* is definitely one of them. However, unlike *Moulin Rouge*, *Crash* deals with serious issues, mainly racism. The thing I love about it is the number of stories and characters that are so intricate and real, and the movie relates how they interact or 'crash' with each other. *Crash* doesn't try to be politically correct; instead, the movie throws P.C. aside to capture the realistic thoughts that actually go through some people's heads.

The casting is GREAT because you see your favorite actors doing what they do best (like Don Cheadle, Ryan Phillippe, and Sandra Bullock) but you also see a different side of others (such as Ludacris and Brendan Fraser). The soundtrack and cinematography are exceptionally AMAZING. I don't want to give anything away, but there are two or three scenes that are executed so well, even the most stone-faced person will be reduced to tears.

March of the Penguins

The cutest documentary of the year! This documentary has helped push penguins past dolphins to become my second most favorite animal behind meerkats. It's the second highest grossing documentary (behind *Fahrenheit 9/11*) for a good reason. Yeah yeah, some people may just push it off as an over-extended National Geographic special, but you just have to watch it to know the difference.

This documentary seriously has everything: comedy, romance, action, suspense, etc. It's info-tainment!!! I learned so much about the life cycle of the emperor penguin (one of the most arcane birds in the world... well, 'til now), and I've been telling everyone about it that will listen to me. Besides, how can you resist the dulcet voice of Morgan Freeman relating how emperor penguins slide on their belly when their feet get tired? Their story is actually pretty inspiring, and women will love how the male penguin actually takes care of the egg for about 4 months while starving and freezing in 150 mph winds.

Get both of these movies on DVD now, and be able to say you loved them way before they win a bunch of Oscars come Academy Awards time.

Engineers in Disguise

By Danny Weiser

While many engineering students wander around North Campus exclaiming how they will never use their engineering skills and never work for an engineering company, we must ask... where might these students end up?

We are all familiar with famous industrial engineers such as Frederick Taylor, who established scientific management, and Frank and Lillian Gilbreth, who established motion studies. Along with these industrial engineers, this list continues into other engineering disciplines with people such as Henry Ford and Alexander Graham Bell. The following list includes many famous people involved in non-engineering fields, yet all of whom have an engineering education.

- Yasser Arafat - Palestinian leader and Nobel Peace Prize Laureate. Graduated as a civil engineer from the University of Cairo.
- Leonid Brezhnev - Leader of the former Soviet Union, metallurgical engineer.
- Leonardo Da Vinci - Florentine artist, one of the great masters of the High Renaissance, celebrated as a painter, sculptor, architect, engineer, and scientist. His innovations in the field of painting influenced the course of Italian art for more than a century after his death, and his scientific studies - particularly in the fields of anatomy, optics, and hydraulics - anticipated many of the developments of modern science.
- Alfred Hitchcock - British-born American director and producer of many brilliantly contrived films, most of them psychological thrillers including *Psycho*, *The Birds*, *Rear Window*, and *North by Northwest*. He was born in London and trained there as an engineer at Saint Ignatius College. During the final year of his life, he was knighted by Queen Elizabeth II, even though he had long been a naturalized citizen of the United States.
- Herbert Hoover - Having graduated from Stanford University in California, Hoover was a 26 year-old mining engineer in Tientsin, China, when the city was attacked by 5,000 Chinese troops and 25,000 members of the martial arts group known as the Boxers.
- Montel Williams - A highly decorated former naval engineer and Naval Intelligence Officer, he is now an author of inspirational books and host of a popular syndicated television talk show.
- Ray Dolby - Audio system innovator and founder of Dolby Laboratories. His technical expertise has won him both an Academy Award and a Grammy!

Harry Potter Movie Review

By Linda Huang

Harry Potter and the Goblet of Fire, the fourth film of the Harry Potter series, has caused quite a stir from hour long lines at midnight to Facebook groups, but how was the movie really?

At his fourth year in Hogwarts, Harry (Daniel Radcliffe) is finally reaching his adolescent years of awkwardness, while Hogwarts is hosting the Triwizard Tournament, where champions from three prestigious wizarding schools are selected to compete in a series of life-threatening tasks. Harry gets set up to compete, and while Hermione Granger (Emma Watson) and Ron Weasley (Rupert Grint) try to help him, he is pretty much on his own... all while trying to get a date to the Yule Ball! However, further challenges lie ahead as Lord Voldemort (Ralph Fiennes) is finally back in the picture, with a plan and a vengeance!

The characters have all matured a great deal in this film, most notably Hermione Granger as shown by a notable Facebook group. Scenes have also matured a bit, adding a splice of humor for older viewers. However, despite the lack of scandalous-ness and the deviations from the book, the film "works." The entire movie is composed of "edited highlights," but they are more than enough to capture the relevant parts of the story and bring us through to the Goblet of Fire itself. *Harry Potter and the Goblet of Fire* brings you into a world of fantasy. Go watch it. Now.



**Bored? Between the
hours of 1:30 and 3:30
on Wednesday?**

Sorry, can't help. Steve's office hours are not valid during winter break. Steve sends his love anyways though.

Internship at Hasbro – Fun Engineering!

By Da Beum Shin

Have you ever imagined employees running around hallways and shooting around Nerf guns in a professional atmosphere? How about riding a pocket bike or making your name tag for your cubicle with Lite-Brite? This unique experience was my freshman year internship at Hasbro Inc. in Providence, RI. Hasbro is a toy and game company, which designs, manufactures, and markets products that you might be familiar with from your childhood – Play-Doh, Lite-Brite, Easy-Bake, Monopoly, Scrabble, Transformers, and so on. A lot of people ask me if I got to play with toys at work, and obviously, the answer is yes! I even got to work with toy designers and contributed my thoughts on new product designs, which was really fun.

The department I worked for was called First Fun Engineering, which supported the “user ages of three to before-ten” product teams on engineering, manufacturing, and scheduling issues. The interns were able to participate in various product lines and teams. Unlike other manufacturing companies that deal with a few projects at a time, Hasbro was a company where that I could develop my skills on managing multiple projects in a fast paced environment. The product teams consisted of people from all departments such as sales, marketing, engineering and packaging, so a lot of projects required good teamwork, and from attending the team meetings and communicating daily with other members in the team, I was able to understand the whole process of producing a product in such a big company including many issues and difficulties that come up during the process. Moreover, my tasks included updating the project status by communicating with vendors and manufacturing side, which moved to the Far East, so I would say that this internship experience gave me a good overview of how an international enterprise operates.

Although the tasks did not require too much of technical knowledge, as a project engineer at Hasbro I was certainly in a good place to develop myself as an industrial engineer. Most of all, it was a great place to put myself back into childhood and enjoy my time with great people!

For information on career opportunities at Hasbro, visit the website at <http://hasbro.com/careers/careers.html>



In Episode VII I will be reincarnated in this gruesome form! Fear Darth-Tater!!!

Internship Review at Pfizer

By Samir Quraeshi

This past summer, I had the wonderful opportunity to intern with Pfizer, Inc. I worked in Pfizer Global Manufacturing (as opposed to Pfizer Global Research and Development). I was an intern at the largest manufacturing plant within the company, in Kalamazoo, MI. I had a great opportunity to make a valuable contribution to the company. I worked on four projects simultaneously, most notably reducing the industrial truck fleet at the plant. This fleet reduction, using concepts of lean manufacturing I learned in IOE 425, resulted in cost savings of over \$100,000 to the company. My accomplishments did not go unnoticed, as I was given the opportunity to present my work to the leadership team of the plant. My intern projects were highly visible throughout the company.

The internship was not just about the work experience, however. Pfizer had an internship committee which organized many wonderful events for the interns to participate in. We had the opportunity to tour other Pfizer plants, such as the Animal Care plant in Richland, MI. We had the opportunity to learn about many other Pfizer businesses and were treated in a first-class manner. Social events were planned to get better acquainted with supervisors and fellow interns. Softball games, ice cream socials, and golf outings were a few of these events. There were over 40 interns in the manufacturing plant, so there were lots of fun activities outside of work as well. If you are interested in a challenging internship and working in a positive work environment with highly visible projects, then Pfizer is the place for you. And yes, there really is a Kalamazoo.

Senior Spotlights

By Punit Mattoo

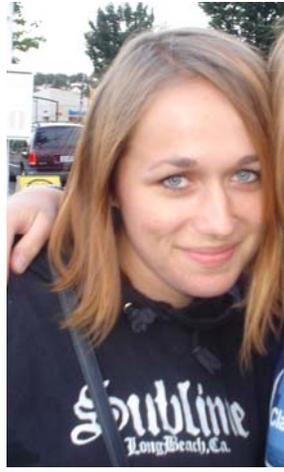
Ron Dysangco



1. Hometown: Sturgis, MI
2. Future plans: Graduate in May, spend the summer in Ann Arbor, and then find a job in or around Chicago
3. Favorite IOE Class and why? IOE 461, because the material is useful and there is an overflow room for lecture, so you can eat

- Panda Express while taking notes and not feel guilty about eating in class.
4. Least Favorite IOE Class and why? IOE 316, because to this day I still don't really understand what a Markov process is.
 5. Favorite Professor and GSI? Professor Amy Cohn and Shervin (IOE 310)
 6. Most memorable college moment? #12 Michigan 45, Michigan State 37 (3 OT)
 7. Most memorable moment in an IOE class? Hearing Professor Reaume voice his opinion about different contestants on American Idol, Season 2 in 373.
 8. Favorite place in Ann Arbor? South U, because everything you'd ever need can be found there.

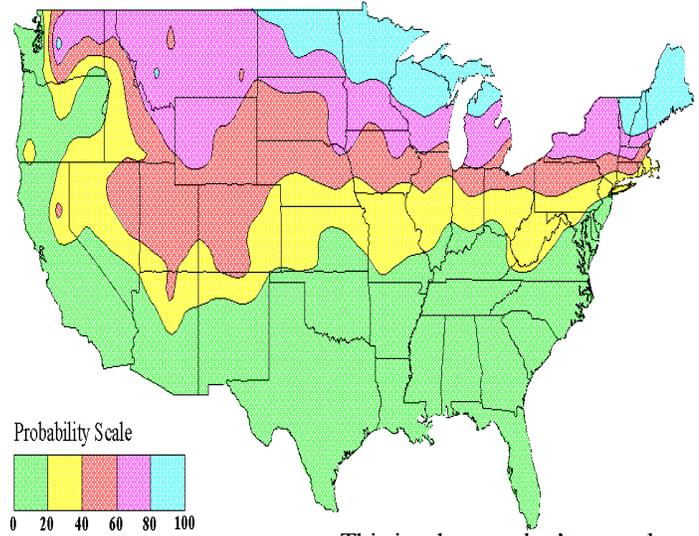
Samantha Jarema



1. Hometown: Columbiaville, MI
2. Future plans: I really have no idea right now. That's why I'm glad that I'm staying another year to get a Masters degree. I may do the PhD thing or get a job and eventually get an MBA, or maybe just even skip the MBA and just start my own business.
3. Favorite IOE Class and why? IOE 373 or 310. 310 was great because I love Amy Cohn. I thought she did a great job with the class and I enjoyed the optimization math. I liked 373 because I think programming is like solving a puzzle and that makes it fun. I also think it's really rewarding when you can finally get your program running.
4. Least Favorite IOE Class and why? IOE 333. I don't like to memorize things and wasn't

- the biggest fan of ergonomics.
5. Favorite Professor and GSI? Amy Cohn and Shervin
 6. Most memorable college moment? The time I fell off the stage seems to stick out. My roommate tried to catch me and missed, and that's all I'll say about that.
 7. Most memorable moment in an IOE class? It wasn't really in a class, but I had to leave an 8am Saturday review session three times because I had a little too much fun the night before. It wasn't exactly memorable in a good way.
 8. Favorite place in Ann Arbor? I love being in the Arb. I think all the open space is great and it's always really laid back. It's great to lie in the sun in the summer or throwing frisbee in the fall, especially when the leaves are changing but its still warm and sunny.

Probability of a White Christmas (snow depth 1" or more)



High mountain areas may have higher probabilities than shown.

This is why you don't use colors for black and white reports.

Cut out this Santa coloring book picture!
(crayons not included)



The Back Page

Top Ten Things to do During Winter Break

By Tiger Li

10. First and foremost, sleep. Sleep until it's dark out again. And then sleep some more.

9. Build a snow fort. If you live in California or Florida I suppose you can build a sand castle.

8. While the snow is around, learn to ski. If you already know how to ski, learn to snowboard. If you can do that too, try telemark skiing. And if you can do that too, nevermind.

7. Watch Michigan take on the Cornhuskers in a game so riveting it will change college football as we know it.

6. Insist that your friends' finals were not as stressful as yours. If words do not compel them, show them your absurd IOE project or that program you wrote that doesn't work but looks impressive anyway.

5. Revel in how sweet your schedule is next semester, or whine about how miserable it will be.

4. You know those giant inflatable light-up snowman decorations your neighbor has? Poke a hole in it. And for the record I didn't tell you to do that.

3. Sleep some more.

2. Enjoy all of the eating/festivities/weight gain associated with Christmahanukwanzakah.

1. Kick back and read the December issue of the IOE Blueprint.



Blueprint Editors:

Steve Agacinski (spagaci@umich.edu)
Kristin Banker (kbanker@umich.edu)
Franklin Jen (frajen@umich.edu)
Jevon Reynolds (jevonrr@umich.edu)

The Blueprint Staff:

Adam Clarke, Sarah Zarowny

Cartoons by David Steele! Thanks for your contributions!!!

Note: The opinions expressed herein do not necessarily reflect those of the Industrial and Operation Engineering Department at the University of Michigan—Ann Arbor. Any questions or comments should be submitted to IOEBlueprintGroup@umich.edu

© 2005