

MIT-CETI '08 TEAM INTERNSHIP REPORT

HOST INFORMATION

Dalian University of Technology 大连理工大学

Electrical Engineering / iLabs Department

June 2, 2008 – June 27, 2008

Dalian University of Technology is very interested in continuing hosting students during the summer. If students would like to come during IAP, the work would be entirely iLabs related.

Zhejiang University 浙江大学

College of Computer Science

July 7, 2008 – July 25, 2008

Zhejiang University is very interested in continuing hosting students during the summer. For IAP activities, we spoke with Professor Shanan Zhu of Net-Labs. If students from MIT are interested, they can help create experiments with Net-Labs. Professor Xiao may also be interested in IAP activities, but we did not get the chance to discuss this with him.

PROJECT DESCRIPTION

Dalian University of Technology – three courses were shared with students: website design (Sean Liu), programming from a mathematical perspective (David Greenberg), and natural language processing (Anna Goldie). For four weeks, each week technical curriculum was presented for 4.5 hours over three sessions (Monday, Thursday, and Friday). Each CETI member taught technical curriculum once a week.



Dinner on our first night at Dalian University of Technology

The CETI team also presented cultural curriculum covering MIT Culture, American dating, and American sub-cultures.

MIT Culture consisted of MIT academics, hacking, extracurricular activities, student daily life, and dorm life. The presentation also included clips of Walter Lewin's physics lecture, Baker House's i3 video, and East Campus's i3 video. It was then followed by an active discussion of the differences between American culture and Chinese culture, and the pros and cons of the two approaches to managing dormitory life. The discussion covered specifically: co-ed dorms, curfews, dorm and roommate selection, and food. Approximately three-fifths of the time was spent on the MIT culture presentation, and two-fifths on the discussion. Afterwards, the CETI team stayed for individual questions.



The audience of our June 10 presentation



Students who stayed afterward on our June 10 presentation

The American Dating lecture presented an overview of the American approach to dating, including choosing “suitable” partners, dating etiquette, and breaking up. Additionally, we showed the short video “Yellow Fever”, which discussed inter-racial relationships.

American Sub-cultures presented the American stereotypes: prep, goth, emo, hippie, etc. Technical difficulties precluded the presentation of the music video “White and Nerdy”. This culture presentation focused primarily on the American definitions of such stereotypes, followed by a discussion of to what extent such stereotypes actually represent the American population.

The second core aspect of the MIT CETI program at DUT was working with both the MIT and DUT iLabs teams to upgrade and fix the iLabs systems at DUT. A majority of the efforts focused on facilitating communication between the MIT and DUT iLabs teams.

Accomplishments include:

1. Identifying an error in the interactive client loading script
2. Updating GUID and passkeys of batched labs
3. Identifying that the batched and interactive could not be merged to a single server due to a .NET version requirement
4. Identifying appropriate user management methods
5. Getting the Moodle server running as an online course management prototype

Two major unresolved issues (waiting on MIT iLabs team) include:

1. Getting the merged batch and interactive servers running
2. Identifying why the Microelectronics Simulator lab is not functioning



Wang Wei and David with the completed multi-touch screen, a side project in iLabs

Zhejiang University – the curriculum from DUT was expanded to accommodate the more teaching-intensive schedule at Zhejiang University.



The entire class at Zhejiang University

For the technical curriculum, the primary difference was that Sean changed the web design unit to be computer architecture. The team taught for a total of three weeks: five days a week, three hours each day. Each week we rotated the technical curriculum. Week 1 was computer architecture, week 2 was Natural Language Processing, and week 3 was Programming: A Mathematical Perspective. At the end of each week, we required students to take a short quiz. For homework, each week we assigned an essay topic.



The ZJU students took us to the movie theater

Each day of teaching was split into two halves. The first half of the class focused on the technical curriculum. The second half of class focused on culture.



Preparing our curriculum in the ZJU lab

Our culture curriculum was also greatly expanded. Topics included: MIT culture, discussion on differences between MIT and Chinese culture, American dating, dining etiquette, American food, misperceptions of the West, American Music, American Politics, YouTube, American Fairy Tails, American holidays, and English idioms.



The graduate student at ZJU took us to Xi Tang

PERSONAL REFLECTIONS

SEAN LIU

From arriving in Beijing to departing from Hong Kong, my CETI experience was unforgettable. Delving into the Chinese culture, I explored the tastes (from pig ears to sheep feet), sights

(breathtaking mountains), smells (think Durian) and sounds (learning Chinese!). CETI reached far beyond any previous internship experience had before – I was able to travel across the globe and get a sense of China: its people, art, government, customs, and extraordinary Olympic preparation. The program was unique in its opportunity for students to travel to more than one location, in my case Dalian and Hangzhou. At each location, the students and staff at the university took us exploring in the local area – visiting beaches, small vendors, local eateries, and neighboring scenic cities. In particular, Dalian University took us on a breathtaking tour of the coastline, in addition to many treks in the local squares (Dalian is filled with squares: People Square, Xinghai Square, Dream Square). Zhejiang University hosted an all-expenses-paid weekend trip to Xi Tang, one of the ancient cultural cities built up along a river. We had the opportunity to taste local specialties, visit the cultural museums, and take boats up and down the beautiful river.



Our trip to Xi Tang

The CETI experience required all the skills I had available. Technical skills were needed to prepare a solid curriculum and be ready to answer student questions. People skills were needed to work with the university administration, share academic curriculum with the students, and find my way around in a foreign nation. This sometimes led to adjustments in the original plan – rather than teach 6.004 to students who were in the midst of finals, I taught website design which was more hands-on and practical for the students. Adaptability was crucial. Some topics, such as government, appeared to remain taboo. This led to a removal of one of the essay topics regarding government. Meanwhile, parts of the curriculum, which I believed to review material, turned out to be brand new.

The students and staff at the school were extremely supportive and helpful. The graduate professors at Dalian gave excellent suggestions for improvement, and the students gave kind feedback. Upon my request, Professor Liu reviewed my teaching material and gave pointers on what she thought the students would find enjoyable. Mr. Yuan also sat in on my class to listen along and encourage. For our cultural lectures, Mr. Yuan was especially helpful in suggesting improvements for adding discussion to our cultural presentations. This made for interactive presentations that were not only fun for the audience, but for us as well.

I think most importantly, it was the students that made the experience truly unforgettable. Over the four-week stay at DUT, the iLabs students our team out on a variety of fun activities including: KTV, shopping, going to the movie theater, cherry picking, senior graduation, watching movies in the lab, attending the school dance, eating subway, visiting the parks, and a

multitude of other activities. David and Wang Wei, one of the graduate students in iLabs, created a multi-touch screen as a 10-day project. The final product was fully functional and extremely fun to use. At Zhejiang University, the students would take us to West Lake, eat with us at the local restaurants, see movies in the theaters, and battle against us online playing Starcraft.

Before beginning work at Dalian, we stayed in Beijing for approximately a week. Following my work at Dalian and Hangzhou, I was able to take a trip around China visiting Shanghai, Suzhou, Nanjing, Xian, Dunhuang, Fuzhou, and Macau. Together, along with my CETI internship at Dalian and Hangzhou, it made for one of the best summers. Ever.



Visiting friends at Tsinghua, and posing in front of their dome, which bears a resemblance to MIT's. We're forming the T of MIT.



On top of the Ming Sand Dunes in Dunhuang