

HANGZHOU TIANJIN PRC

The MIT-CETI TUT-ZJU Summer 2007 Team



The Team enjoys a rare moment of pensive solitude at the Great Wall. From left to right: Rany Woo, Gil Patrice Zamfirescu-Pereira, and Samuel Poon.

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New friendships were formed... ”**

My experiences in the CETI 2007 Hangzhou and Tianjin Team have been unforgettable. Personally, it was a time during which I was able to better understand my Chinese roots and to connect with my fellow Chinese students both at the intellectual and social level. As a team, Gil, Rany and I had the chance to represent MIT to faculty and students at Tianjin University of Technology (TUT) and Zhejiang University (ZJU). I had the privilege of sharing MIT's unique D-Lab Development class with the Chinese students, cultivating their interest in international development and global citizenship. Fur-

thermore, the team and I explored one of the most dynamic cities in a rising nation. With this, I can truly say that CETI 2007 has opened my eyes.

The three of us were received with much hospitality, where new friendships were formed. Since we were pioneering the CETI program at TUT, it was a new endeavor for both MIT and TUT. We were sent to teach at the International College of Business and Technology, of which Li Guishan was the Dean. In the three weeks that we stayed there, Dean Li kept us busy, and made every effort to show us things that we wanted to see in Tianjin, in-

cluding a vocational college in automobile manufacturing (since Tianjin is known for its industrialization) and a public hospital. Dean Li along with his executive team provided strong support for our team during our stay. In fact, they had two point persons for us: Jay and Ellen, who went out of their way to entertain our needs and wants, from organizing class logistics to buying groceries and DVDs. This strong support enabled a very smooth teaching program. As for ZJU, we also had a point person, Professor Lu. Since CETI programs have taken place on this campus before, the program was in a sense more ma-

Samuel Poon

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ture and there was less support provided for our team. At both universities, we roomed in the international student’s dorms, which had air conditioning and private toilets for our suites.

The teaching experience was fantastic. I taught D-Lab to the junior students at TUT. These students are in a very specialized program, where all classes are taught in English. Therefore our student’s English standards were much higher than expected. This really propelled the discussions in D-Lab, where the students expressed sophisticated points. It made my life as a teacher much easier, because I can give the floor the students for more of the time and let them teach each other. This interactive learning style was intentional as to increase their opportunities to speak in English, and it was very effective.

This is highlighted in the syllabus, where almost every lecture had a interactive activity involved, e.g case study role play, design a micro-finance system, etc. This interactive style of teaching was less successful in ZJU. This was because the students I taught there were freshmen, who were still shy with their English. However, since ZJU is a first class university in China, the students learned the material very quickly. By the end of my three weeks at ZJU, the students would talk to me about material from different parts the D-Lab class, which was very impressive. At both universities, the D-Lab class was well received, simply because it was a class with non-conventional teaching methods and content that related to them as international citizens. It showed them how a simple appropriate technology can change millions of lives and it made interna-

tional development a tangible concept as supposed to a distant theory. Simply put, it helped them think big.

Our experiences beyond the classroom were enriching. We got to teach the students in the classroom, but we got to know them while eating with them, going to the park with them, singing at the Karaoke box with them, etc. At TUT, a student named Song Xie, graciously invited us to his home. That experience allowed us to peek into the personal lives the students. It gave us a sense of locality. We also explored the city of Tianjin with a small group of students, where they brought us shopping – their favorite pastime. At ZJU, we made strong bonds with a few of the guys and they would plan biweekly trips for us, whether it be walking by the West Lake or attending a birthday party. These experiences helped me to connect to these students beyond the intellectual level—we had our good laughs and fun times. We also held a fairwell “frat” party before leaving each campus, which consummated our program in a spirit of camaraderie.

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The Team had plenty of time to get out the classroom and bond with both faculty and students. Right: The Team joins their TUT sponsors for a delicious meal. Left: The Team graciously accepts a birthday karaoke invitation from their ZJU students.





D-Lab Development was taught by Samuel Poon, a member of MIT's class of 2009 majoring in course 14 and minoring in course 11.

D-Lab Development SP.721 Special Programs

D-Lab Development is a course that prepares students to respond to the basic needs of low-income households and communities in developing nations with technological solutions which are inexpensive, ecologically sustainable, and institutionally easily adaptable. This course introduces various notions of development, and explores several technological innovations necessary to enhance the quality of life in these communities. The course also prepares students to focus on specific issues, such as the need for potable water, low-cost agricultural processing equipment, basic sanitation, and affordable energy. D-Lab students have applied their knowledge in Sub-Saharan Africa, Latin America, South America and India in the past.

Week 1:

Introduction to appropriate technologies (Introduction, Interactive: World fact quiz; Appropriate technologies); The three sectors: public, private and non-government; History of Development: Small is beautiful -Schumacher, Macro approach -Sachs; Interactive: Role Play and Stake holder analysis.

Week 2:

Micro-enterprise: The micro approach, Appropriate Technology: Peanut sheller (video), Interactive: Design a plan to disseminate the peanut sheller; Developmental Entrepreneurship: Devolution of power, Case Study: Grammeen Phone; Special: Ideas Competition.

Week 3:

Smoke: Health Problems, Social Problems, Solutions; Special: D-Lab Brazil (video).



“I had imagined that teaching would be easy--that if the professor had enthusiasm, the students would have enthusiasm as well. But the experience was not so simple.”

The Team was fortunate enough to work well with the exceptional faculty at TUT's International School of Business and Technology. Left: Dean Li Guishan, at the school's graduation ceremony, bravely looks towards a bright future for the International School.

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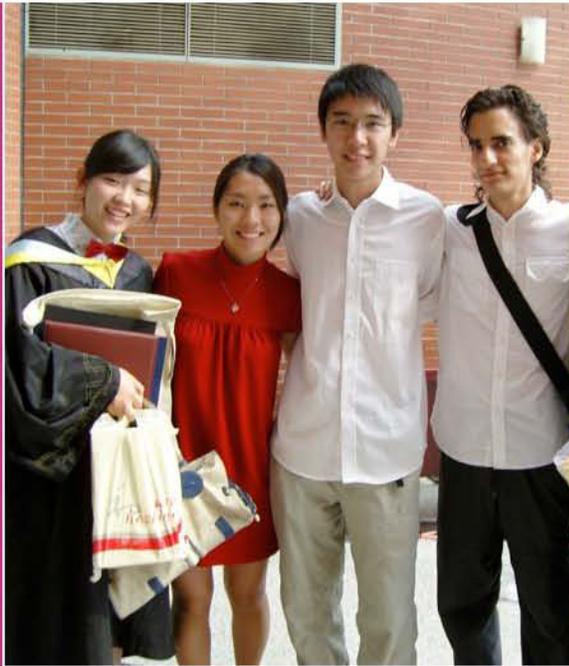
The CETI experience is both indescribable and unbelievable. Unbelievable because we taught students our age or older at highly ranked universities in China. Indescribable because the experience encompassed far more than teaching, extending into very personal cultural exchange. My teammates and I had discussed what we expected to get out the experience beforehand, and we could not come to any sort of a consensus simply because we had no clear idea of what to expect. CETI was a mystery to us.

But we were not about to let a bit of mystery spoil our fun. We bravely flew into China with high hopes that it would--at the very least--turn out to be an excellent adventure. Indeed,

our adventure started off well.

We were met in Beijing by Jay Wang, director of foreign affairs at Tianjin University of Technology (TUT); Jay drove us from Beijing to Tianjin, a journey of about two hours. We were very warmly welcomed at TUT by Dean Li (Li Guishan) and the rest of the staff at the International College of Business and Technology. Our hosts took us to their offices and introduced us to the college and its history, noting two unique features: First, the school offered a professor exchange program with a Canadian university, so that at any given time there were several Canadian professors teaching at the school--the school conducted all of its teaching in English. Second, the school offered a student exchange program with the same Canadian university--the best six students of each year were invited to attend the Canadian school on an exchange scholarship each year. We thought these programs would make for an interesting environment, especially with regards to teaching, given that the

The Team was invited to various social events around and off campus. Left: The Team attends TUT's graduation ceremony, pictured with Grace, valedictorian. Right: The Team takes a leisurely boat ride on Tianjin's ample lake, pictured with two students. Of course, it doesn't compare to West Lake.



Gil Zamfirescu-Pereira

I don't think there's a summer experience that can possibly be more enriching than CETI. CETI throws you into a situation that requires you to discover a great deal of maturity... I learned a lot about China, I learned a lot about teaching and about cultural exchange, and I learned a lot about myself.

Teaching was a very different experience at ZJU. English levels were excellent relative to those at TUT, despite their curriculum being taught entirely in Chinese. The students were able to understand what we said to them much more easily. For my class on management, I switched the format slightly after seeing what had and hadn't worked at TUT. As my class relied heavily on group work, I decided to introduce some incentives to encourage group work. For these group case studies, I would choose three teams and a student leader at random from each team. The leader would receive some sort of incentive to encourage him to work and to facilitate his encouraging his students to work--the incentive usually consisted of something as simple as a package of oreos, but it was always well accepted. Furthermore, when a student answered a question--when correctly or incorrectly--I would give the student a cookie. This was an attempt to apply the business environment to the classroom by injecting incentives. It's hard to say if it worked--I'd hardly call TUT a control group, given the difference in levels--but the students certainly appreciated the Oreo cookies, and appreciation does tend to lead to a smoothly functioning classroom environment.

We bonded a rather extreme amount with our ZJU students, on a level we had not imagined with our TUT students. Two students in particular--Ice and King, as they called themselves--stood out as the leaders of the group. They organized events for us, such as evening walks along the West Lake with all

of our students. We bonded during these excursions. On one of these excursions, in a flash of cultural inspiration, we decided to sing the United States' national anthem and teach it to them. We sang it along the banks of the West Lake, and then invited the students to sing their own songs. While they were doing this, one of the girls volunteered to ask passer-by for spare change in return for our performance, but we made no money that night. Even though, we made excellent memories.

Our final class day, the students arranged a party for us--going so far as to rent an apartment for the party. After the party, we invited some of our closest friends back to our dormitory for a post-fiesta party. We had a great time--we've kept in touch with these friends, and no doubt, should one of return to China in the future, we will see them again.

I don't think there's a summer experience that can possibly be more enriching than CETI. CETI throws you into a situation that requires you to discover a great deal of maturity. Teaching is an amazing experience for someone who's never truly done it before--becoming a better teacher teaches you a great deal about becoming a better student, and I gained a great deal of respect for all of my teachers. Interacting with all of our students was a remarkable experience; we were treated like rock stars.

But you learn what it's like and you learn that it's something that has to be dealt with. Finally, CETI forces students to live together almost 24 hours a day for eight weeks. I learned a lot about my teammates, I learned a lot about China, I learned a lot about teaching and about cultural exchange, and I learned a lot about myself.



People and Organizations was taught by Gil Zamfirescu-Pereira, a member of MIT's class of 2009 majoring in course 14 and minoring in AIS.

People and Organizations 15.668 Management Sciences

People and Organizations aims to provide an understanding of the human and organizational contexts in which students will be living and working during their careers and a grounding in analytical tools and personal skills that students will need to analyze, work effectively in, and lead an organization. It outlines today's major challenges facing the management profession and uses interactive exercises, simulations and problems to develop critical skills in negotiations, teamwork and leadership.

Week 1:

Lectures and interactive exercises: introduction and brief overview of the three lenses used to examine people and their roles in organizations, examples of applications; discussion of students personal experiences in organizations, examples in American media and current events; contemporary management challenges, obstacles faced by managers today; discussion of students' personal career aspirations.

Week 2:

Lectures and interactive exercises: in-depth discussion of each of the three lenses; strategic design lens: analyzing and making sense of organization structure; cultural lens: examining traditions in organizations and how organization choose to portray themselves; political lens: political interests within organizations and distribution of power; revisiting the previous week's examples and reapplying the lenses.

Week 3:

Lectures and interactive exercises: effecting change in organizations, case studies on change; negotiating; sources of leadership and power; social psychology; case studies drawn from well-known American firms, possible integration of Chinese firms as well; implications for the future.



“ It was the first time that I had ever taught academic material...

The Team is pictured here with a few of the talented staff from TUT's International School of Business and Technology. From left to right: Gil Zamfirescu-Pereira, three staff members, including Dean Li Guishan (center), Samuel Poon, and Rany Woo.

but we were in such an *unintimidating* environment... I immediately felt at ease... ”

At Tianjin University of Technology (TUT), we were warmly welcomed by Professor Li and Professor Wendy Fu who showed us around the school campus and helped us to get settled in. We also met Jay and Ellen, two other faculty members, upon our arrival in Tianjin, China. The hospitality of the faculty members at TUT was overwhelming. The school paid for all our meals on campus, faculty members treated us to several banquet dinners, paid for our toiletry items and snacks, and even covered the expenses of a day trip to Beijing. We were housed in a comfortable three room suite, with air-conditioning, refrigerator, shower, and toilet. Our accommodations were incredibly comfortable and we enjoyed having the privacy of our separate rooms while still being in close proximity to each other. Spending time with Jay was one of the high-

lights of our trip because he was just so kind and accommodating of all our requests. If we ever needed anything from the store, he was willing to take us there in his car and help out in any way possible.

I was the first one to start teaching my class, 9.35: Sensation and Perception, the day after our arrival. I was glad that my class size was small, with about fifteen students per class. (However, this number varied throughout the program because students were still in the midst of attending classes and taking exams so they frequently had to miss class.) The students had been split up so that Sam and I taught the same group of third year students (mostly female), while first year students attended Gil's class. I found that the third year students' level of English was much more advanced than the first year students, so I had relatively little trouble communicating with my students. The students did struggle when it came to hearing the unfamiliar terminology associated with my course material. At first, I felt that the TUT students had some trouble forming an interest in the material that I taught. We were teaching students in the



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international business department of TUT, so they had had no previous exposure to neuroscience or psychology in their education. However, as the program progressed, several students told me that they enjoyed the class because the material was a refreshing change to what they were used to learning.

One cultural difference that I noticed during our teaching was that many of our students were extremely reserved and bashful about publicly expressing themselves. We found that during ice-breaker games, students showed noticeable discomfort in role-playing and being the center of attention. Gil, Sam, and I made considerable efforts throughout our time at both universities to draw our students out of their shells, using creative games and activities to help them develop confidence in their public speaking skills. I really enjoyed my experience teaching at TUT. It was the first time that I had ever taught academic material to students so I had been apprehensive about the experience, but we were teaching in such an unthreatening environment that I immediately felt at ease. I liked using my creativity to explain a concept in alternative ways when my students didn't understand and having to think on my toes.

In our spare time, the faculty members at TUT organized various events for



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us that included visiting a nearby hospital, giving a presentation to teachers, visiting a local vocational college, spending a day in Beijing, and attending the school's commencement ceremony. Although we had fairly busy schedules, we really appreciated the school's efforts to introduce us to other aspects of the city.

The students at TUT were incredibly friendly and hospitable. In fact, one of our students, Viven, took Gil and me

to her hometown in Handan and even accompanied us in our travels to Chengdu and Shanghai. We had an amazing time bowling, singing karaoke, dancing at clubs, and even eating meals with her family. Rachel, another student, also met up with us in Chengdu and spent several days with us. It was the best component of my experience to be able to interact with our students on such an informal basis.

On July 17, we traveled to Hangzhou, to begin teaching at Zhejiang University.



One of the Team's frequent social excursions with ZJU students. Above, the team spends some time at ZJU's sports stadium. From left to right: Samuel Poon, Ice, Steve. Far right: Kevin.

On July 17, we traveled to the even hotter Hangzhou, China to begin teaching at Zhejiang University (ZJU). We met with Professor Lu who showed us to our rooms in the international dormitory. In this building, we were housed in double occupancy rooms, so I roomed with Xiao Xiao, a member of the CETI iLab team. We found ZJU's campus to be quite beautiful. Impressive works of architecture could be found all over campus and the school was spread out into four separate areas. One discomfort of arrangements at ZJU was that we were housed on a campus that was a 15-20 minute taxi ride away from the campus where we were actually teaching class, so we had to spend money everyday for the commute to and from our classroom building.

At ZJU, we taught students majoring in computer science, so we had mostly

male students instead of the female student composition at TUT. We had a group of about 40 students that we broke up into 3 different groups to make our individual class sizes smaller. The students were incredibly bright at ZJU and much more willing to ask questions and contribute to the discussion. Many of my students were very interested in topics that I taught, so I often found myself having to do additional research to answer questions or do Q&A sessions at the end of my lectures.

Since our class schedules were more standardized at ZJU and we ended at 12 pm everyday, we had more time to spend with our students. Our students lent us bikes and one of our daily activities was biking to the cafeteria for lunch after class everyday. We also played sports like basketball, badminton, and pingpong with our students, went for trips to get

Rany Woo

All in all, my time at TUT and ZJU were unforgettable. I really couldn't have asked for a better summer or a more fun CETI team. Thank you, CETI 2007!

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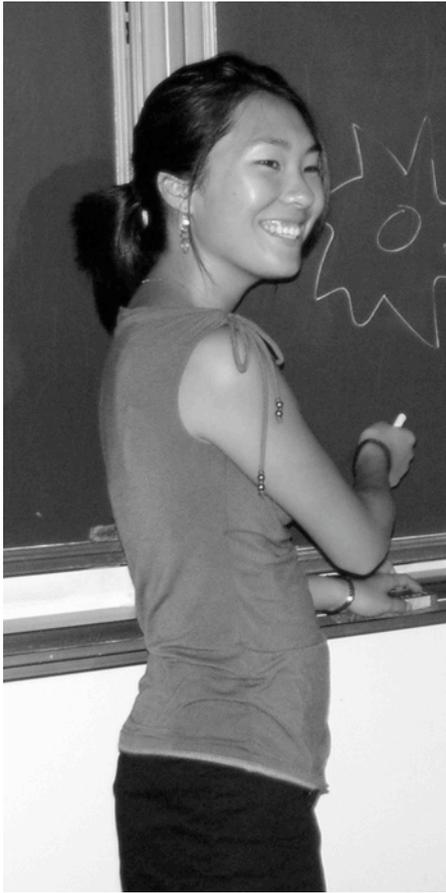
bubble tea, had mahjong competitions, played video games, and went out for dinner together. We were constantly involved in some activity, while also trying to escape the unbearable heat and stay hydrated! Hangzhou was a beautiful place, so we went for frequent trips to the West Lake.

All in all, my time at TUT and ZJU were unforgettable. I really couldn't have asked for a better summer or a more fun CETI team. Thank you, CETI 2007!



A smattering of photographs from the journey. Top left: The Team poses with TUT's director of foreign affairs, Jay Wang, at Tianjin's local mall. Top right: Rany Woo poses with a new friend in Chengdu. Bottom: The Team with their ZJU students on the last day of classes. The students rented an apartment and threw an excellent party for the Team.





Sensation and Perception was taught by Rany Woo, a member of MIT's class of 2008 majoring in course 9.

Sensation and Perception

9.35 Brain and Cognitive Sciences

The human brain is the most complex, sophisticated, and powerful information-processing device known. To study its complexities, the Department of Brain and Cognitive Sciences at MIT combines the experimental technologies of neurobiology, neuroscience, and psychology, with the theoretical power that comes from the fields of computational neuroscience and cognitive science. Today, at a time of increasing specialization and fragmentation, our goal remains to understand cognition- its processes, and its mechanisms at the level of molecules, neurons, networks of neurons, and cognitive modules.

Week 1:

Introduction to the Physiology of Perception; Lateral Inhibition and understanding visual illusions: Hermann grid, Mach bands, Simultaneous contrast; Lab 1: Memory – interactive lab that helps us to understand how and why intrusion errors, short term memory, and proactive inhibition occur when we are trying to remember something; Implicit and Explicit Memory.

Week 2:

Learning from Patient H.M. (anterograde amnesiac); When memory fails us: forgetting, eyewitness testimony, childhood amnesia; Perceiving depth and size; Fun with stereoscopes and interactive demos.

Week 3:

Attention: what is it?; Visual illusions: Stroop Effect, Inattention Blindness, Change Blindness; Face Recognition & Thatcher Illusion; Disorders of face recognition: The Man who Mistook His Wife for a Hat.