I am Sammi Sung, a Computer Engineering student. I am very glad to be selected as one of the student exchanging to MIT. Although it is only one semester, it provides me a great chance to widen my horizon and have a totally different understanding in engineering studies.

I took 3 classes, 2 project classes and 1 graduate class: "Microcomputer Project Laboratory", "Making mobile apps" and "Digital Image Processing". The courses were much different than those in CUHK. The lesson hours were shorter, but more time were spent on doing the projects and assignments and the knowledge were expected to learn through working on them. Although the courses were much more intense than I thought, I really benefit a lot.



Microcomputer Project Laboratory (6.115) provided me a hands-on experience in working in the industry as a computer engineer. We were given 8051 microcontroller development kit and PSoC, and were required to design and control some "devices" using them. It is one of the most intense courses in EECS department, spending students for around 22 hours per week in the laboratory. I once felt very exhausted and wanted to give up, but thank God for giving me strength and wisdom to go through. In the end, I found this course really trained me how to work under pressure, and the knowledge in working with MCU and having good project management are also very beneficial to my future.

6.115 lab: Control robot arm using keypad



6.115 lab: Using laser pointer to draw picture, controlled by touch screen monitor



6.115 lab: Program and connect a device that can automatically find the working frequency of a fluorescent lamp and turn it on



With prof. Steven Leeb in the 6.115 victory dinner, celebrating the end of the course. The big screw represents the practical experience we had in this course. (Another version from students: "cuz this course *screw* students up the most")

In the mobile app development course, we learnt how to write Android apps using App Inventor and Android Studio. In the final project, we were assigned workers from Google to be our mentors. Our team were the very first team working on Android Watch, this made doing the project a very hard time, as Android watch is new technology and resources available are very limited. Although it took us a lot of time to understand the behavior of the watch, we could really feel the joy of success when the app was finally working in the way we wanted.



Group photo with prof. Hal and Google mentor



Our Android Watch app

In the graduate course Digital Image Processing, besides teaching the common technical skills, professor Lim liked to share with us his personal experience that are related to the course, such as how they used the technique of image processing to find the location of the murderer in the assassination of Lincoln the US president, the recent research discovery from his students in image processing, etc. The lively examples further invoke my interest in signal processing and attending graduate study.

Besides practical skills, the learning environment in MIT also inspires me a lot. Students are very hard working and eager to ask questions during the lesson, office hours and on the online course forum. The laboratory is always full of people working on their projects. Many students participate in research projects. I can really see their passion towards engineering.



With prof. Jae Lim

We are also required to have a project/research in MIT. I participated in the ZERO Robotics to program game for secondary school robot coding competition. My work was to convert the game commands and codes into "blocklys" for the middle school competition, allowing students to build a program by combining and matching the "blocklys" together, similar as puzzle game. This helps middle school students who are new to programming to learn and program their robot easily.



Pistol class!

MIT also provides vary special PE classes every quarter term, such as rifle, SCUBA Diving, Sabre. I took the pistol class and get a chance for firing a real gun. What I enjoy the most is the coach did not teach us the technique to use a gun solely, but he also taught us how to maintain a good self-control, which is the most important criteria in handling gun. This technique benefits me in my daily life, helping me to calm down and stay focus better under tiredness and pressure.

Life in MIT is not just about studying, students also have lots of fun activities to join. There are many programming and robotic completions organized in campus and outside campus called "hackathon", where students can show their programming skills and creative idea. During Spring Fest they have some booths for fun and performances from famous people. Some clubs organize fun activities such as skiing tour, flying tour, you name it. It is highly recommend to participate in some of them to feel the MIT "Work hard, Play hard" culture.





Flying above Boston, organized by the MIT flying club.

Party time!



Students threw a piano from the roof of a dormitory to celebrate the "drop day" (last day to drop a course).



Skiing!



What I saw outside my dormitory near the end of the semester.

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