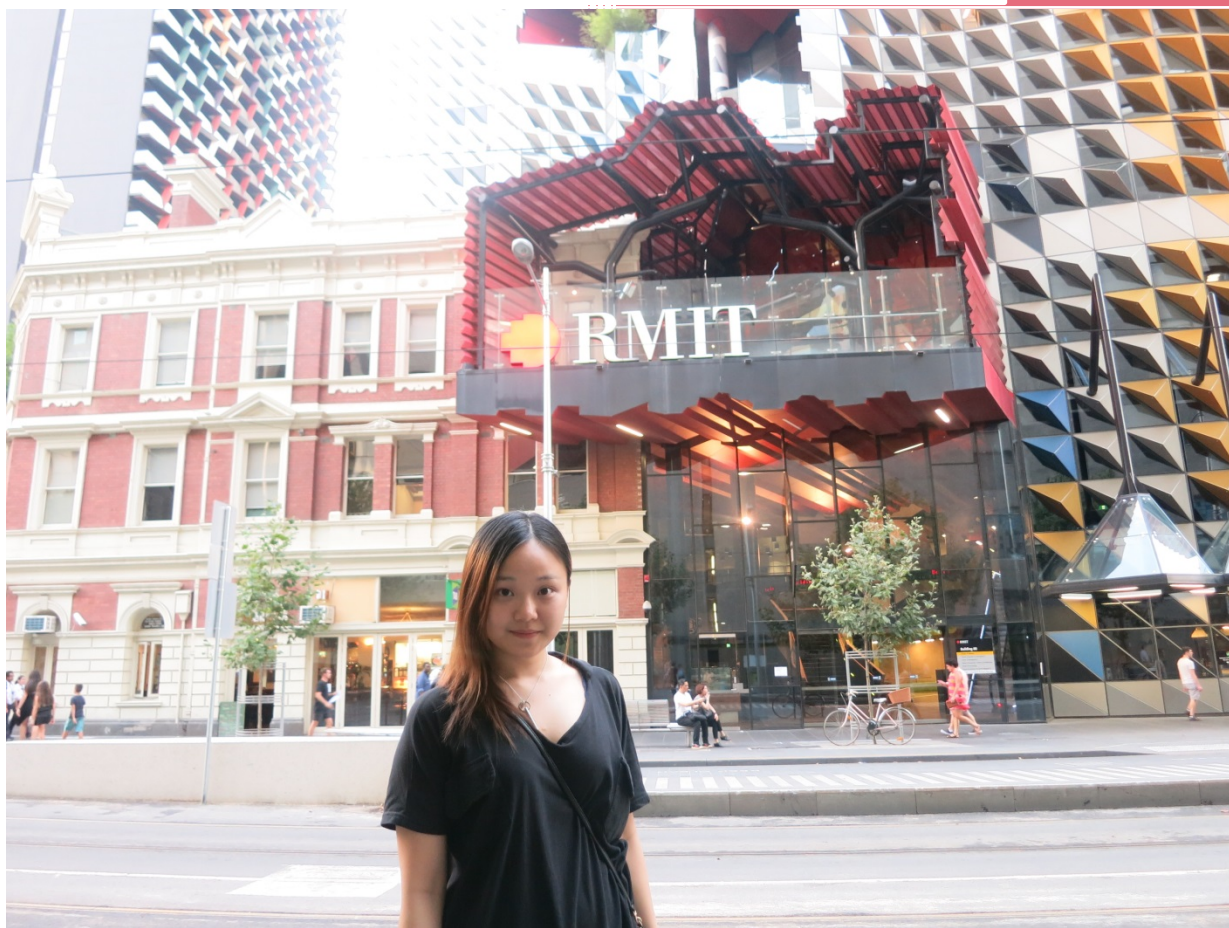


Wong Tit Shing Exchange Scholarship

Exchange Learning Report



Name: Vox Ka Lai Wong

Department: ISE

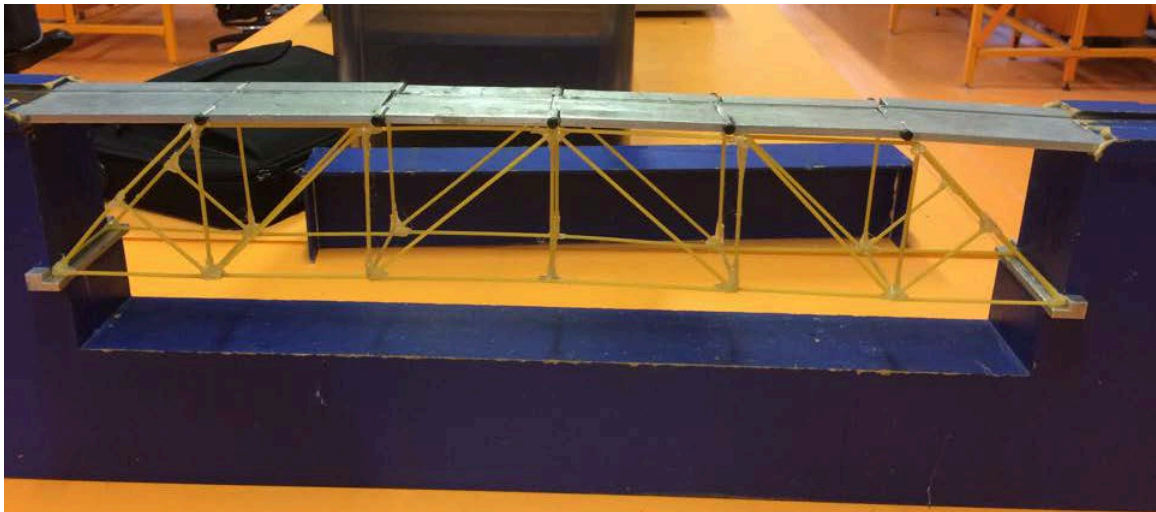
Country: Australia

Host Institution: Royal Melbourne
Institute of Technology

Exchange Period: Feb 2015 – Jun 2015

Thanks to the Wong Tit-shing Exchange Scholarship, I was supported to study in Royal Melbourne Institute of Technology (RMIT in short) for a semester. This overseas attachment had much influence on my learning in product engineering and had broadened my horizons by showing me a different culture.

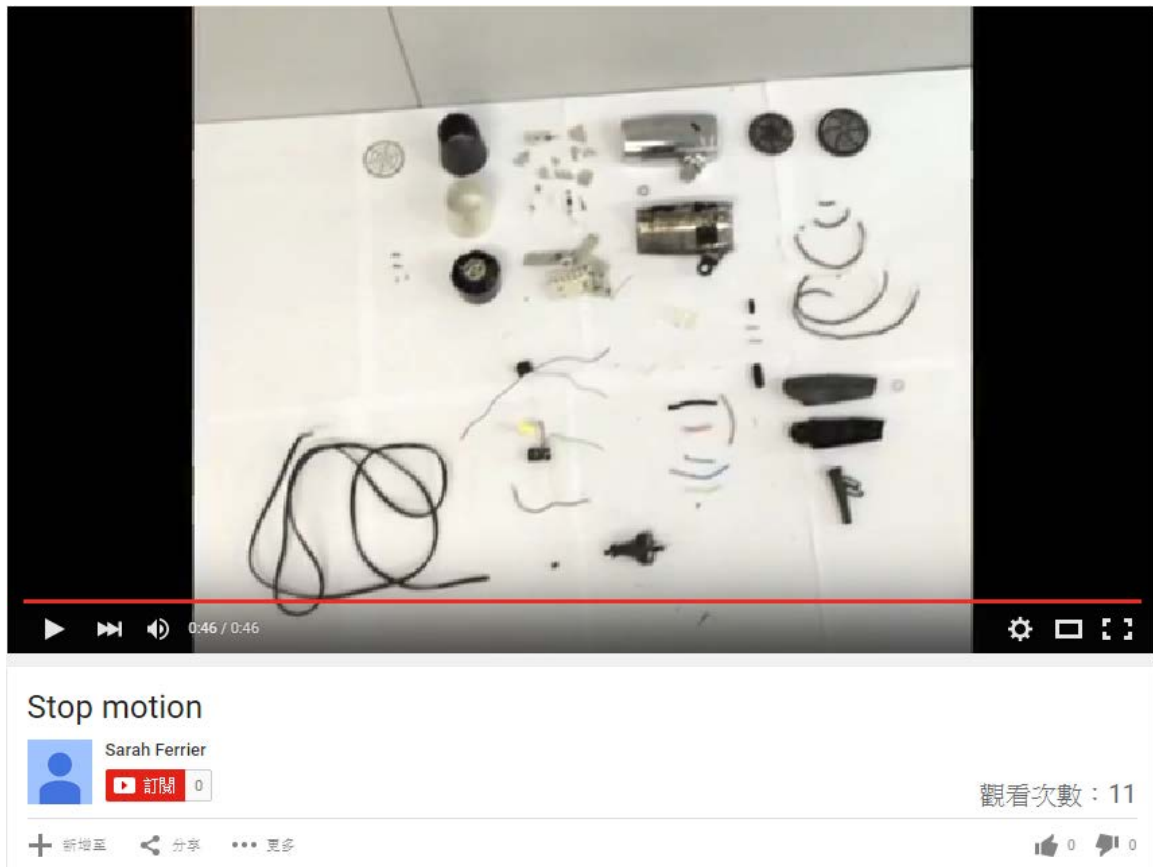
During the exchange program, I gained many hands-on experiences. RMIT encouraged group works so as to cultivate team spirit in us and more importantly, to equip us with the skills to bring our knowledge into practice. In the Mechanics and Materials course, we had to design and make a bridge out of spaghetti. In this project, we applied the knowledge we gained in class to analyze every truss design with respect to force distribution, stress analysis, factor of safety, etc. Aside from consolidating our theoretical knowledge, we practiced how to apply it and realized the difference between theories and reality. I could see my improvement in problem-solving and project management, not to mention the capability to apply theoretical knowledge. I was so proud of my team when our product got first runner-up among over 300 students.



Pic_1. The spaghetti bridge we built with dead load on it.

Moreover, I got deeper insights into industrial design from the course Industrial Design Engineering. This course taught me that innovation is about adding value to customers instead of the product. Each design project, we were assigned a segment of customers and we had to ponder on how to modify a product according to their needs. We started from understanding our customers and translating their needs into product design specifications. When analyzing our customers' needs, we did not only collect their opinions, but we also observed their behavior so as to pay heed to their unobvious needs. We then studied various kinds of products which could serve their needs. We looked into the problems that users encounter and brainstormed solutions based on them. I think this process is applicable in any innovation stage.

Instead of finding ways to add more features to a product or to enhance the performance of a feature, we should put more focus on the problems themselves. This encourages innovation, because it helps us to break the walls built by our cognition of the existing solutions.



Pic_2. Capture of one of the projects done in this course in which we applied product autopsy

Other than academic insights, I got so interested in the culture in Melbourne likewise. One thing that I appreciated a lot was that the people in Melbourne seldom throw away malfunction or broken products. Instead, they do a little bit research and try to fix it on their own. Exploring, studying and fixing the tools we use daily are very beneficial to our comprehension about products. In order to equip ourselves with more technical knowledge or sense for innovation, we should grasp these cheap and meaningful chances. We need to be more curious about things around us and spend some time to study them. "I have no special talents, I am only passionately curious" quote from Albert Einstein. Curiosity and the time spend on investigation cultivate possibilities for innovation. To innovate, we therefore shall "stay hungry, stay foolish" in all things around us.

All in all, the past 6 months was a remarkable milestone in my life due to this exchange program. Apart from academic gains, my personal growth was boosted over the program. I am sincerely grateful for this chance to upgrade myself and to pave the way for a brighter future.