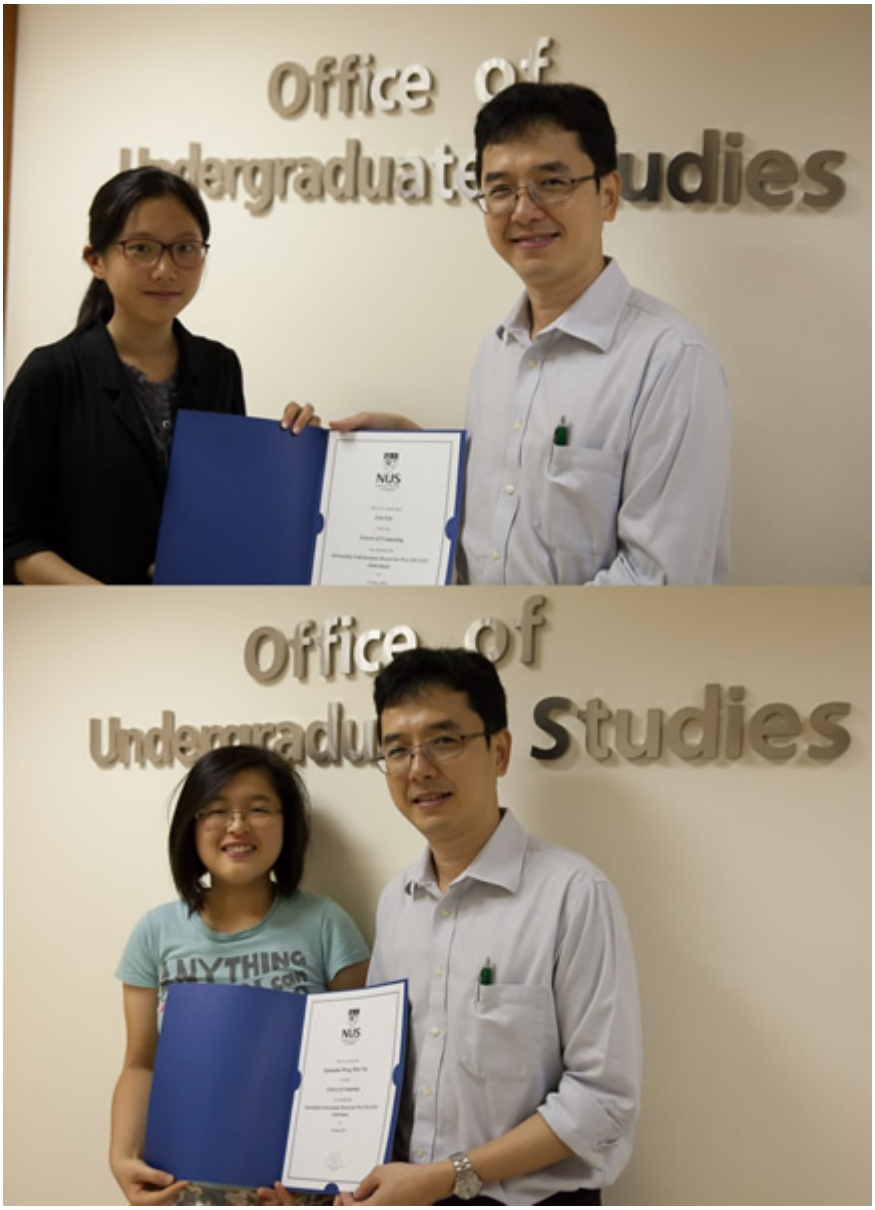
# CS and CEG students win Outstanding Undergraduate Researcher Prize AY2013/14




14 July 2014 – Computer Science student, Samantha Wong Shin Nee, and Computer Engineering student, Lin Lin, were each awarded a $2000.00 cash prize for winning the Outstanding Undergraduate Research (OUR) Prize (Individual Category) in June. Both Lin and Samantha graduated this month.

According to Lin, her project entitled, 'Biologically Inspired Composite Vision System for Deep Field Vehicle Tracking and Speed Detection', is a "traffic monitoring system inspired by the visual structure found in raptors. In this system, I built a composite sensor to acquire multiple depth-of-field information. With the software I developed, it is able to track multiple expressway vehicles over a longer range and provide accurate speed

information for over-speeding vehicle detection. A novel speed calculation algorithm was designed for the composite vision information acquired by the system."

In describing her project, 'Sentiment Analysis of Twitter Using Probabilistic Methods', Samantha said, "Given a sentence that is relevant to a brand, companies are interested to know if a user is expressing positive, negative or neutral emotions towards that particular brand. Many methods have been applied to mine sentiment from large datasets, such as Twitter or Facebook. I investigate the use and manipulation of simple conditional probabilities based on a training set of tweets to derive a measure for scoring the sentiment of test tweets. This project gave me insights into the effectiveness of simple probabilistic measures in classifying tweet sentiment; the results show a surprisingly good performance when compared to other more computationally expensive machine learning algorithms."

The OUR is an annual, university-wide competition that was established to encourage research among NUS undergraduates by presenting opportunities for them to participate in research while integrating teaching and research at various levels of experience and expertise, thus allowing undergraduates to develop the capacity for discovery through research and providing them a glimpse of what graduate studies would be like. Entries were assessed on their originality, significance, understanding of the subject matter and evidence of critical and independent thinking.