

***Abstract:***

The ever progressing technology is no doubt beneficial to mankind. However, the current inventions derived from new technology is not thorough enough to cover the needs of more focused groups. This talk, by a group of three high school students, serves to inspire people to better understand the needs of high school students and how Python can be used to benefit them. Innovative examples based on the authors' personal observations and experiences together with illustration of procedures and real-time demonstration will be presented.

***Presentation Outline:***

1. Brief description of life of high school students at present. Comment on how modern technology has improved their quality of life and in what other aspects of life can further progression be made by using Python.
2. Case Study 1:  
*Observation:* Students' increasing open-mindedness  
*Problem:* Students lack of opportunity to develop a healthy relationship  
*Proposed solution:* Crushes (Google App Engine in Python)
3. Case Study 2:  
*Observation:* Lecture being a norm in high school in Singapore as preparation for university  
*Problem:* Students take blurred pictures of the lecture slides as a result of unable to catch up with the pace of the lecture  
*Proposed solution:* Blur Words Recognition (OpenCV)
4. Case Study 3:  
*Observation:* Crowded school canteen during recess time  
*Problem:* Many students, being unaware of how long they have to wait, queue up for a specific stall, causing long waiting time and inconvenience  
*Proposed solution:* Canteen real time monitoring (Raspberry Pi)
5. Conclusion and future work