Mobile application to group people in large TEAL classrooms

Summer student project for May-August 2020, supervised by Dr. Chris Bouwmeester PEng

Target Student Population(s)

Undergraduate student in Engineering Science, Mechanical Engineering, Electrical or Computer Engineering in years 1-3.

Brief Project Description

I need way to automatically group large numbers of students in active learning classrooms that leads to greater positive interdependence. I want to create a mobile application that can direct individual students where and with whom to sit with based on personal characteristics and a history of a course. To realize this project, you will have full access to the IBBME design studio.

Expected Learning Outcomes

You will be expected to:

- Use your imagination to find a fun way to use augmented reality to group people easily and efficiently
- Create a mobile app that is capable of being used on android and apple smartphones

Expected Research Outcomes

Through this project you will be contributing to pedagogical research that aims to explore new ways of learning and improve the undergraduate student experience. You will be expected to present you work at the Undergraduate Engineering Research Day (UnNERD). Successful completion of the project will enable the student to receive joint authorship in a conference publication.

Required Skills

- Basic programming experience (Python, Matlab, etc.)
- Familiarity of AR software

Funding

Ideal candidates from the University of Toronto will have secured funding (e.g., the First-year Summer Fellowship, or the <u>Engineering Science Research Opportunities Program</u>).

Application Details

Please use the application form provided

Updated: February 20, 2020