### CAPSTONE PROJECT TEAM 2: CAMPUSCONNECTIONS



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## What is CampusConnections?

CampusConnections is an Android based mobile application that provides students and visitors of McMaster University with location-based campus information, engaging interactions with the campus through Augmented Reality (AR), and a sense of connectedness with the McMaster community. The app is built using Unity, leveraging a mobile device's camera and GPS sensor. With the main campus map view, the app let users explore events and lectures happening on campus, as well as search for specific information, which can be shared with friends easily through our built-in friend system. The AR functionality allows users to interact with the buildings on campus with their camera, and view location-based information in real time. The main campus map view also visualizes all users' location information (with user consent) on the map, to raise awareness, foster a sense of community, and hence strengthen the social connections on campus.

#### Software Architecture Component Diagram Campus Event Lecture Schedule Schedule \_Registration\_ Lecture schedule Event schedule Authentication Lecture Data by Permissions Campus Users -Data-Connections Event Data by Permissions\_\_\_\_\_ Database Chat messages-Location Data friends' locations Backend Server Azure SignalR Chat Data-Tools Used Firebase (7) GitHub (1) mapbox

#### **Team Members**





Michael Kim



Waseef Nayeem



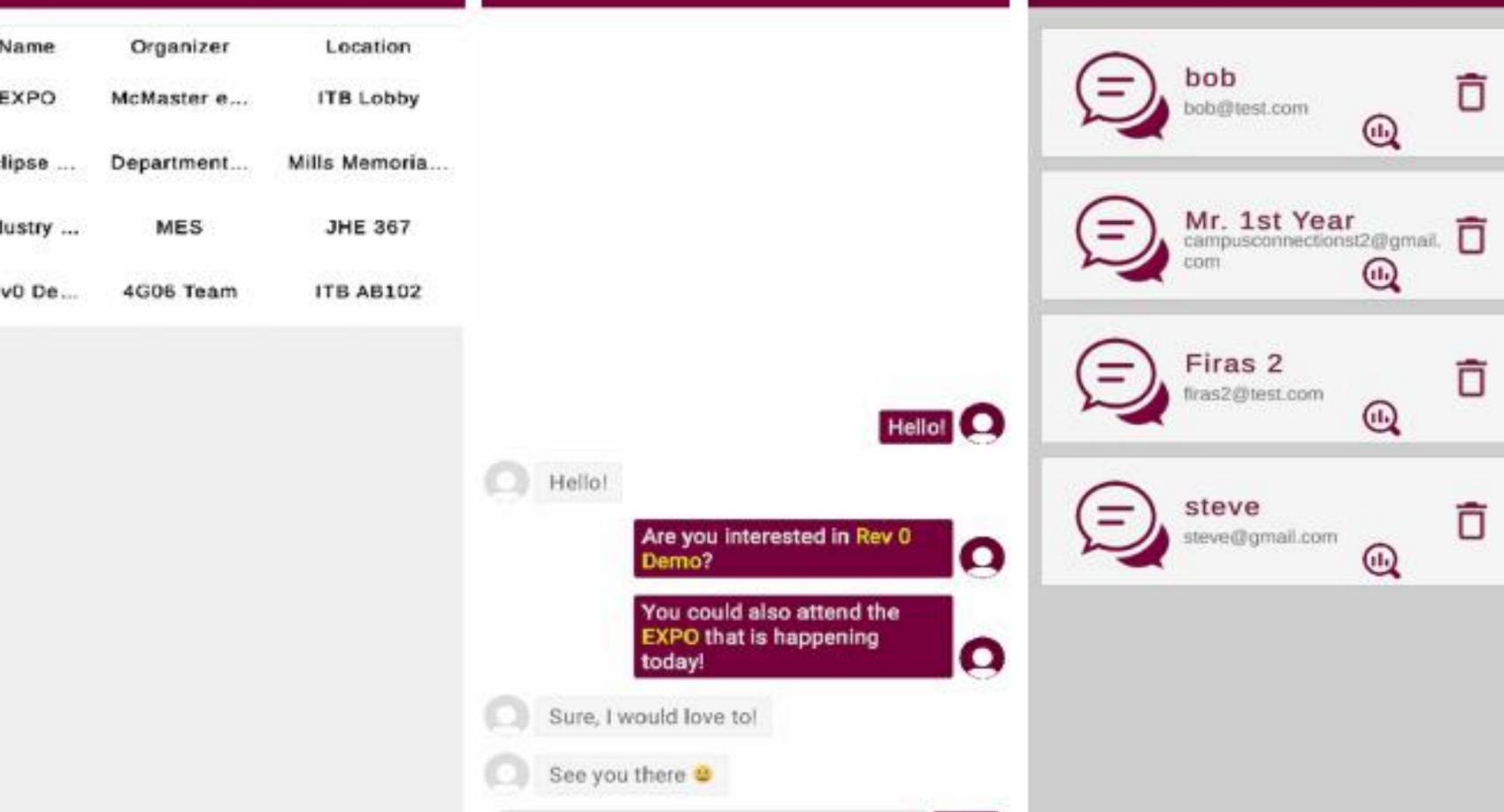
Zihao Du



## Acknowledgements

To Dr. Irene Yuan, supervisor of this project and for all her help in designing and improving the usability of the application.

# 



# Bookmarked Events Chat

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Scalability: New data and users can be easily added or changed. AR elements can be added by pushing a single unity package using Vuforia.

Key Benefits

Friends

**Centralization**: One location for admins and users to access all the information they need at McMaster.

Ease of Use: Using simple designs with McMaster style makes it familiar to all user on campus.

Discoverability: With AR, users can find events and friends with ease throughout the campus.