Faculty Name:

Sharon Di

Faculty Email:

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Lab:

DitecT

Project Title:

Develop pedestrian safety warning system on Apple Watch

Description:

Ensuring pedestrian safety at intersections remains a persistent challenge. We aim to utilize camera-based object detection combined with user device localization to alert pedestrians to potential dangers. This application demands low-latency communication with user devices such as the Apple Watch or smartphones. Latency can occur at various stages, including from the camera to the server, during calculations on the server, and from the server to the user's device. We aim to minimize latency at each stage to ensure the effectiveness of the warning messages. The project needs students to develop warning generation algorithms and send/receive MQTT messages. And do uncertainty quantification for the algorithms used.

Location of Research:

Hybrid (both Remote and On Site)

# of hrs/week:

20

Department/Program:

Civil Engineering & Engineering Mechanics

Eligibility:

BS, First Year, BS, Second Year

To apply, please contact:

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