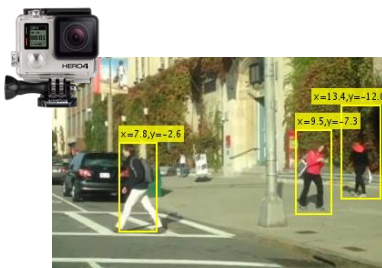


# FALL 2018 COURSE OFFERING

## CEE5250/CS5090 SPECIAL TOPICS:

### MOBILE AND VISUAL SENSING FOR ENGINEERING APPLICATIONS

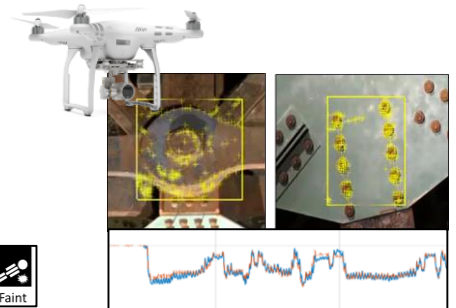
This course exposes students to ongoing research in **mobile and visual sensing**, i.e., techniques, algorithms, and systems that leverage the sensors in **smartphones, cameras, drones, and other Internet of Thing (IoT) devices**, to deliver real-world engineering applications. The course will teach students some popular/useful analytical techniques and then show the application of these techniques to real systems. Example applications includes:



Pedestrian Tracking



Activity Recognition



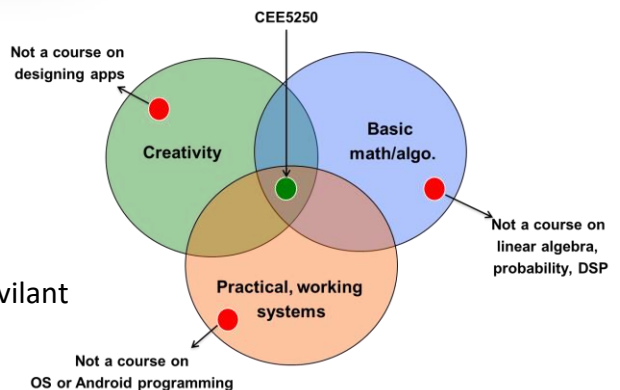
Vibration Measurement

,and other topics for mobile and visual sensing such as

- Indoor Localization
- Dead Reckoning
- Object Detection
- Structure from Motion (SfM)  
: Constructing 3D Model from Multiple Images

Prerequisite:

- Linear Algebra (MA2321 or MA2330) or equivalent
- Probability (CEE3710 or MA3710)



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