

Project Proposal

Team Impulse

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Background:

Currently when police officers are on duty, the most commonly used communication tool between officers is through radio. It is a great communication tool. When there is an emergency and a police officer is chasing a suspect on the street, the police officer has to talk through the radio to call for backup while in pursuit of the suspect. However, it can be very difficult for the officer to clearly explain his/her location or situation through the radio while in action. The less time it takes for officers to call backup, the higher the chance is they will arrest the suspect.

Furthermore, we will utilize the heart rate sensor in the watch to monitor an officer's heart rate. With perpetrators being murdered, evidence of the officer's heart rate can be analyzed.

Solution:

The prototype we are going to build can be used on Apple Watch. The Watch will detect police officers' heart rate, and it will trigger the alarm automatically when unusual heart rate is detected. The dispatch center and nearby officers will receive the alarm and GPS location of the officer, and provide support immediately. However, the officer will be prompted on their watch to accept back up.

Objectives:

1. Reduce response time for backup.
2. Provide more accurate and real time locations of police officer who in pursuit.
3. Provide real time heart rate of police officer, which help police station determine the level of emergency.

Key Stakeholders:

- Police Department
- Police officers
- Public
- Dispatcher
- Team Impulse