



# Tech To Protect

## **Contest 001 - Guardian**

### **Network Security Dashboard**

Project by:  
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# Submission Summary

11032019 - Contest 001 - In Person

Guardian OTG(on-the-ground), Guardian Dispatch, and Guardian Euno are the three components that form the ultimate network security system. Guardian OTG will allow on-the-ground first responders to get a glimpse of their network security with an easy to use native mobile app. Guardian Euno is the backbone of the operation, a back end service that will allow dispatch to receive information regarding the network integrity of connected clients. Finally, Guardian Dash, a web-based dashboard, allows dispatch to make sure all first responders have a healthy network connection. This AIO(all-in-one) solution was built on top of a real time communication protocol along with a fast and reliable message queueing transport.

# Who are we?

**Jason Huang**



**Systems Architect**  
Also, an avid cyclist (yes, I stop  
at stop signs)

**Andrew Struck-Marcell**



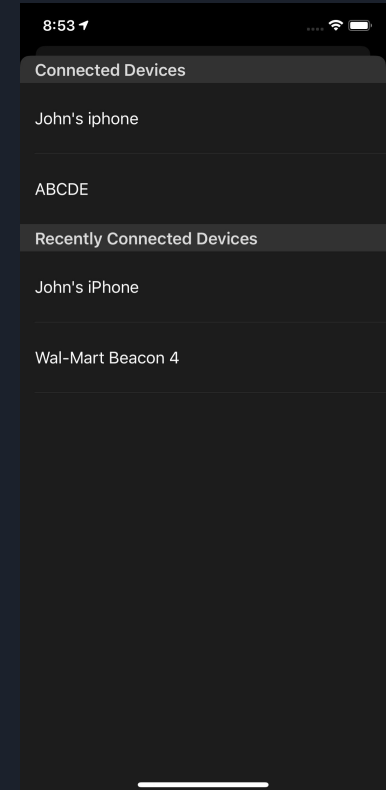
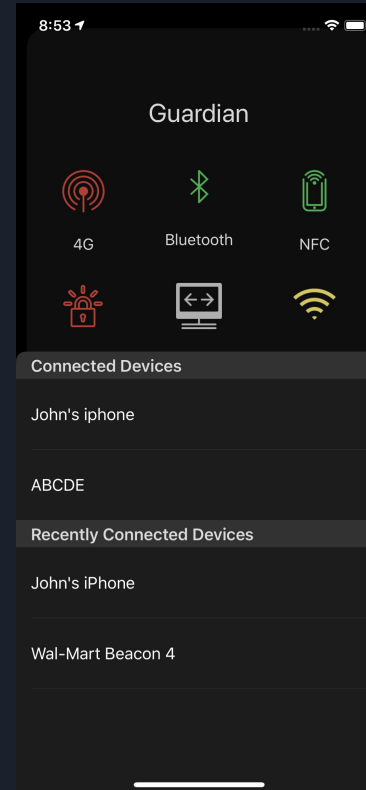
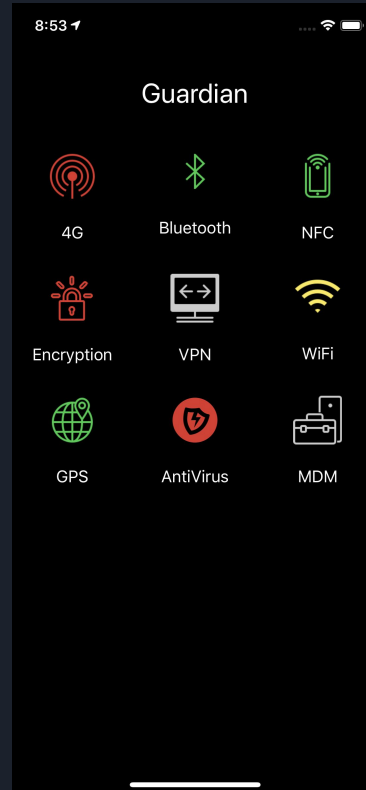
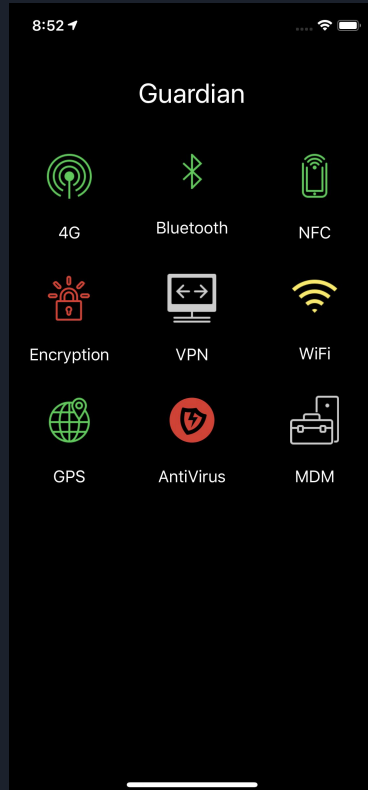
**Mobile App Developer**  
Also, a trained music  
composer!



# Addressed Requirements

The Guardian system allows for real-time bi-directional communication between personnel on the ground and command center agents. Guardian's robust message queueing system will never miss a beat, ensuring that all messages are received from every direction. The built in network security engine will notify command center agents of anomalies happening on the ground. SafeNet, a protocol that will identify if a user goes dark, will notify nearby personnel and the command center that the user is in danger.

# ScreenShots - Mobile Status Dashboard App



# ScreenShots - Dispatch/Command Center Dashboard


### Users

22A60286-6A21-4708-B9E8-EDB5EFD9CE

760D34E5-7D73-4B9E-BD1C-625BAC21D813


7DAC2C8C-9686-4B42-832A-431F2F99DBE0

Smokey the Bear




LTE

disconnected  
AT&T




VPN

connected




MDM

first responder  
mdm 111




BLE:

OFF




WIFI

connected




NFC

on




GPS

on



HDD ENC

on



AV

on



# Overview - Key Functions

- Unique mobile phone identification process -> pub/sub/ack
- Reliable messaging transport
- Bi-directional and real-time communication protocols
- Easy to use with gloves on
- Bright and intuitive user interface

Github repository : [https://github.com/jasonh9/TTP\\_360View](https://github.com/jasonh9/TTP_360View)