

# CPR CONNECT



CONNECTING RESPONDERS AND VICTIMS

Farrah Alkhaleel, Co-Founder

Dara Bakar, Co-Founder

Mentors:

- Dr. Benjamin Abella, HUP
- Dr. Ari Brooks, HUP
- Dr. Thomas Farmer, SEAS



- *Spring 2016 Penn I-Corps National Science Foundation Accelerator*
- *Penn Center for Health Care Innovation Accelerator Semi-Finalist 2015 (ranked 9/96 teams)*
- *Weiss Tech House Summer Start Up Space 2015*

# TECHNICAL TEAM



Vivek Panyam, SEAS'16  
Hardware development



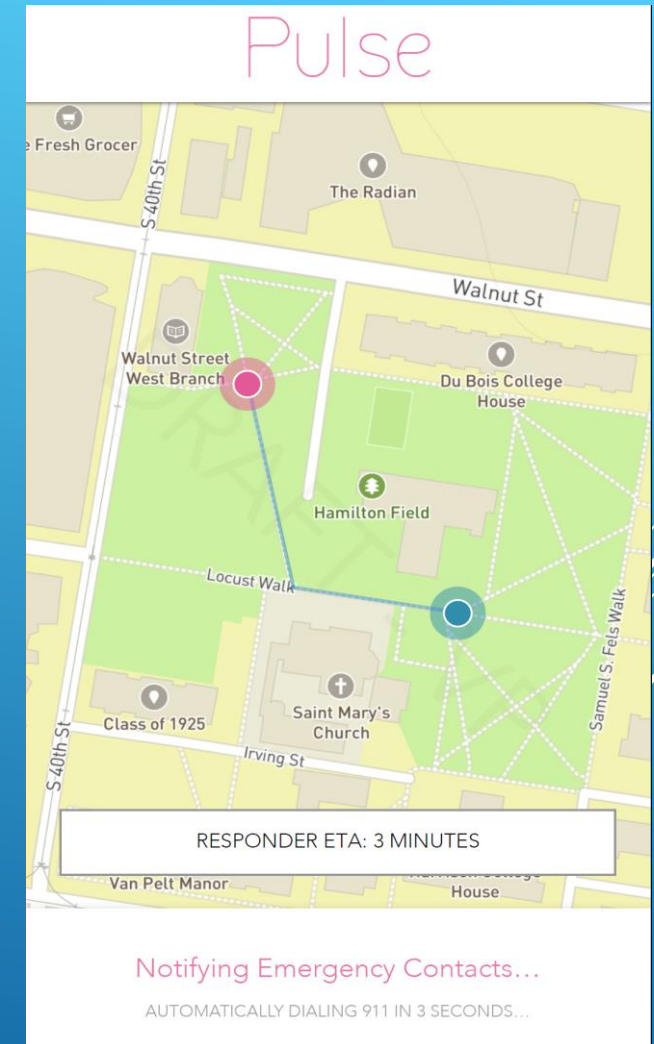
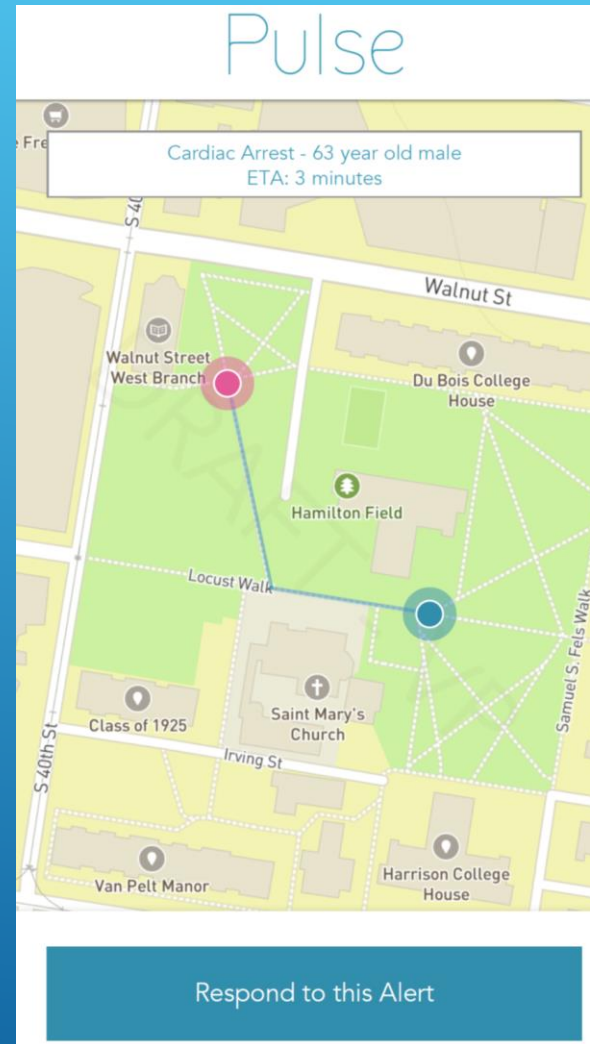
Kevin Lei, SEAS'16, WH'17  
Software development



Shichao Wang, SEAS'16  
Software development

# PROBLEM

- **Emergency response times are too high.** In Philadelphia alone, response times are an average of 15 minutes, whereas the national standard is 9 minutes.
- Bystander CPR could increase the chance of survival for a cardiac arrest victim by **over two-thirds** (American Heart Association).
- With over 12 million responders being trained for CPR annually, no current technology exists that connects bystander CPR-certified individuals directly with the over 28 million at-risk cardiac arrest victims.



CPR Connect's Solution: Pulse App + Pulse Device



# MARKET SIZE ESTIMATE

- **28 million individuals** who are over the age of sixty and who have one or more risk factors for sudden cardiac arrest in the US
- Over **12 million people** are certified for CPR by the American Heart Association annually.
- **Total estimate~ 40 million individuals**



# PULSE (HARDWARE) + DIGITAL HEALTH APP

Technology consists of an innovative wearable device that detects both heart rate and respiratory breathing rate to provide two measures to accurately detect a cardiac arrest and reduce false positive rates.

- Wearable notifies 911, emergency contacts, health care providers, and nearest CPR-certified responders of a cardiac arrest through Pulse App.
- Wearable consists of innovative sensors for increased sensitivity.

Technology also consists of a digital health app that locates a victim when a cardiac arrest occurs utilizing Google Map technology.

- Pulse App identifies nearest AEDs and notifies CPR Certified responders of an emergency that is less than 6 minutes away.

*Technology is currently being developed and we will be filing for a patent as we progress with customer development.*

# TIMELINE FOR MVP

## **-November to February:**

- Customer development (interview at-risk patients and responders.
  - Goal: ~100 interviews)
- Value Proposition
- Business Model

## **-February to March:**

- Continued app and hardware development

## **-March to April:**

- Proof-of-Concept testing

## **-April to May:**

- Pilot product to customer segments