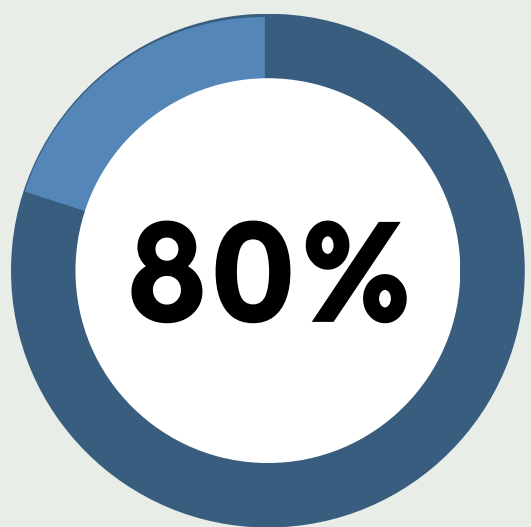


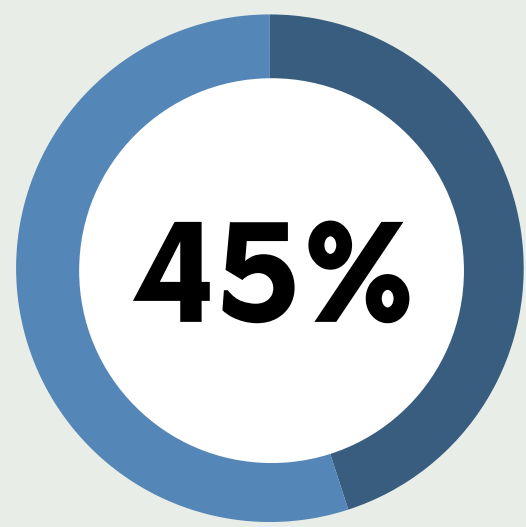
Arianna Rahmathulla, Grace Zhou, Tanishka Dhake, Richa Trivedi

How might we **measure, record, and respond** to heat stress among **elderly populations** in urban heat islands, using alerts and community-based support to prevent heat-related harm?

Problem



heat-related deaths are over the age of 50



heat-related deaths occur indoors at home

The elderly:

- lack the ability to thermally regulate
- are more likely to have a medical condition
- are more likely to take prescription medicines

Existing Solutions

Inaccessible. Ineffective.

Only **19-25% adoption** in adults 65+



Cannot accurately **measure** and store real-time **body temperature**

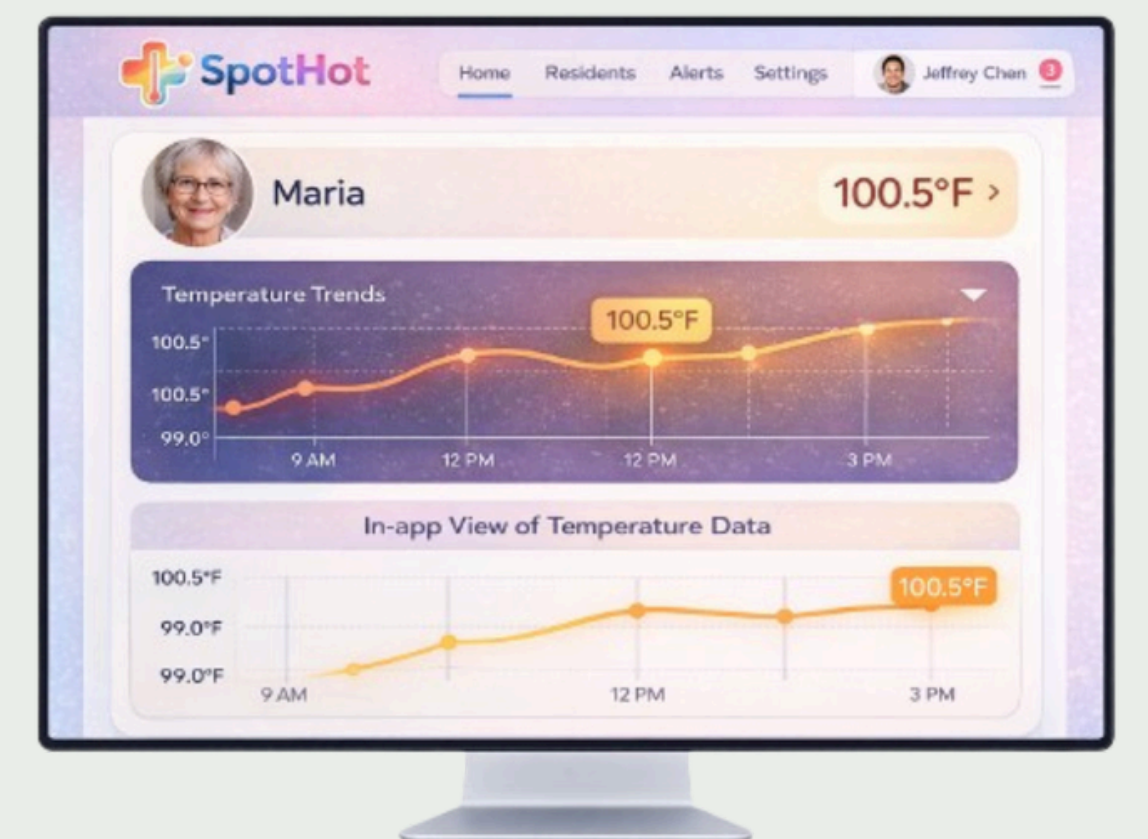
Unique Value Proposition:

“Smart Watching, Without the Watch”

Hands-free, real-time infrared temperature monitoring

Notifies caretakers for **proactive** heat stress mitigation

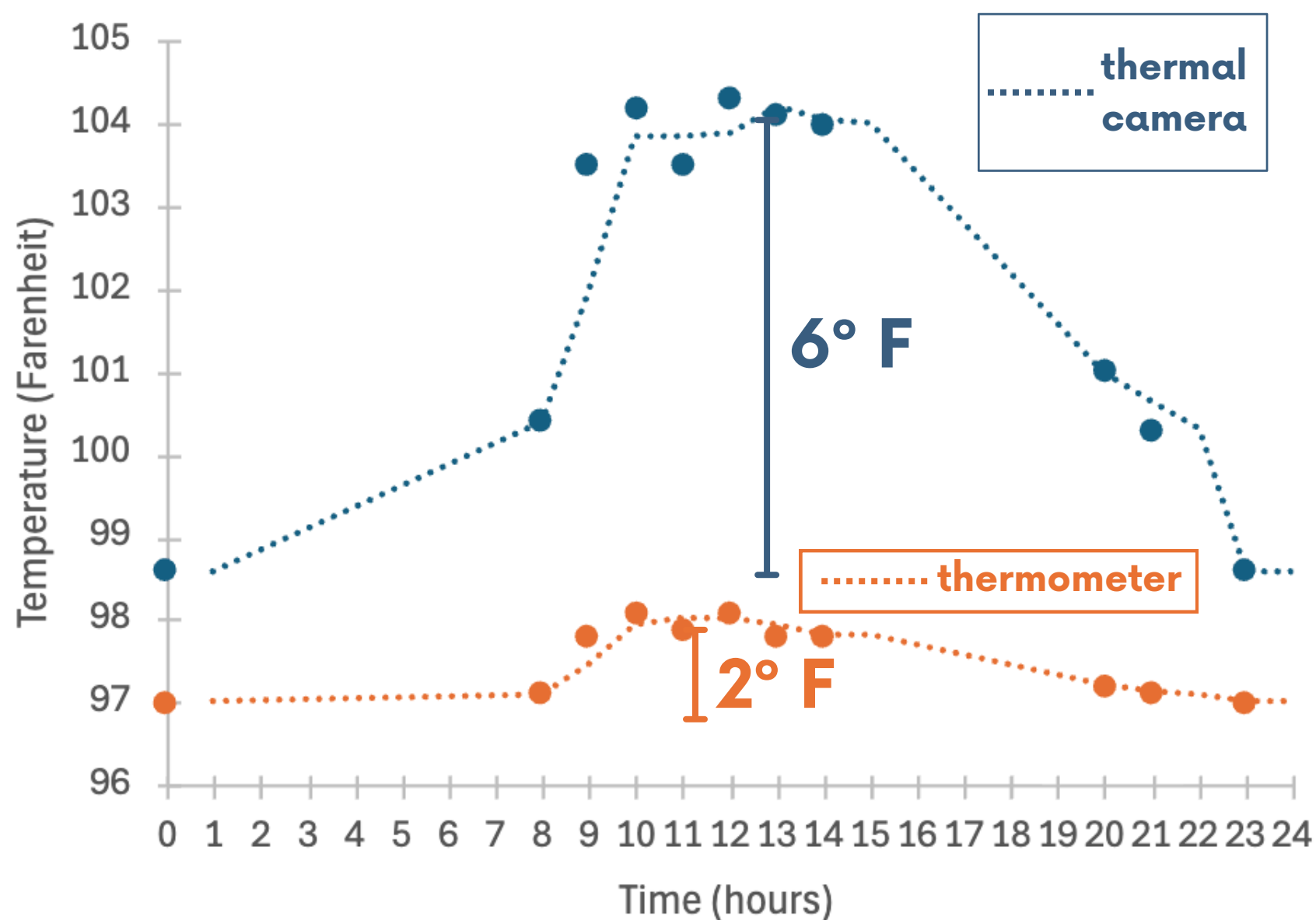
Continuously monitors temperature relative to a **personal baseline**



Uses **facial recognition**, then measures heat around the eye to estimate body temperature



Thermal Camera and Thermometer Temperature vs. Time



Traction Experiment

Baseline temperature approximately **97-99** degrees Farenheit
Alerts sent based on **long-term temperature data**

Future Avenues

- Identify **low grade fevers** (a symptom of UTIs, etc.)

Early Adopters

- **Homes** via physician recommendation
- Senior Assisted Living **Facilities**

Next Steps

- Continue to incorporate technical features (coding)
- Run **pilot** study

Looking Ahead