

# EAGER: SOCIUS: Socially Responsible Smart Cities



Yasser Shoukry  
UCLA

Min Kyung Lee  
CMU

Vasumathi Raman  
Zoox Inc

Mani Srivastava  
UCLA

[yshoukry@ucla.edu](mailto:yshoukry@ucla.edu)

[mklee@cs.cmu.edu](mailto:mklee@cs.cmu.edu)

[vasumathi.raman@gmail.com](mailto:vasumathi.raman@gmail.com)

[mbs@ucla.edu](mailto:mbs@ucla.edu)

## Objectives

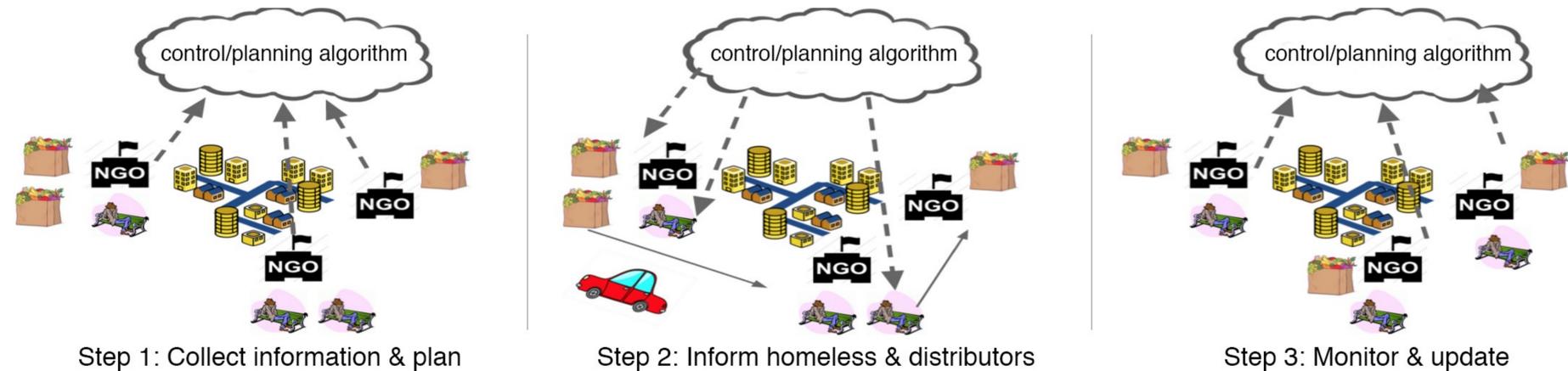
- Utilize CPS infrastructure for better management of city services, taking responsibility for monitoring the needs of its citizens.
- Develop a framework to estimate the location of people-in-need from sporadic measurements.
- Develop a proof-of-concept implementation of food supply-demand management for people-in-need.

## Key Challenges

- System-scale information fusion and planning algorithms.
- Principles, interaction techniques and measures for smart city CPS with human-in-the loop.
- Develop communication channels for smart city community services.
- Study the social effect

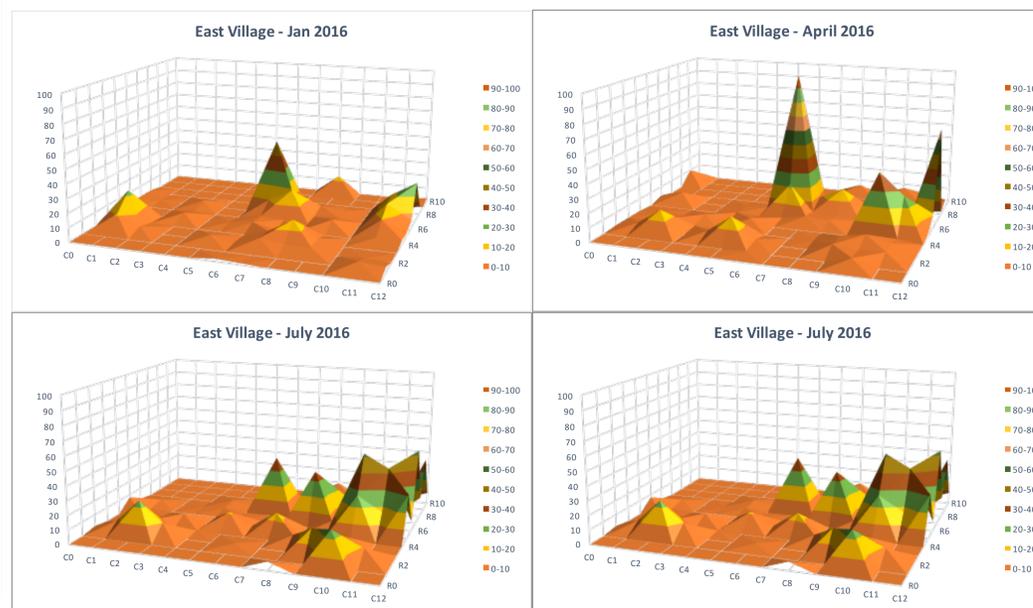
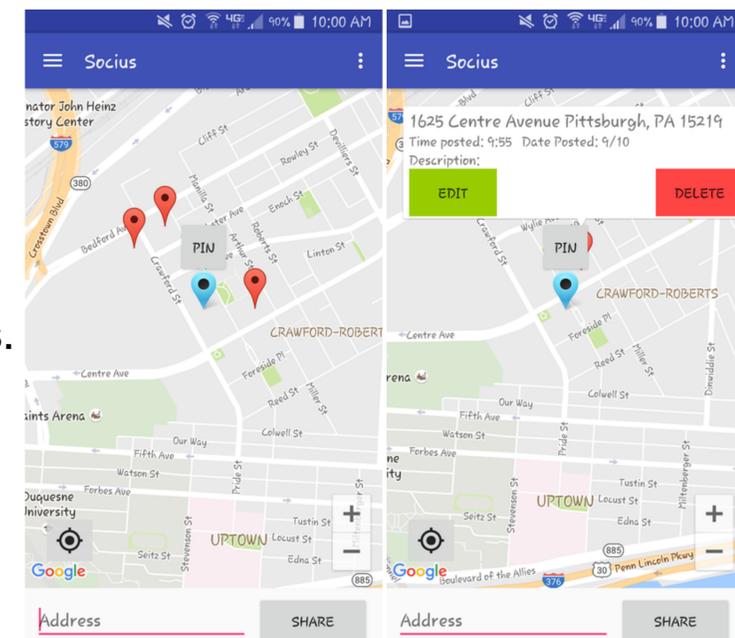
## Students

- Debbie Tsai (UCLA)
- Vincent Kang (CMU)
- Lisa Otto (CMU)



## Crowdsourced sensing:

- Developing location-based smart services for the homeless population.
- Multiple-stakeholders (service providers, homeless population, and everyday citizen) can report the locations of the people-in-need and available services.
- Performing social studies to understand the benefits and risks for such location-based service.



## Next Steps

- Develop algorithms for analyzing crowdsourced sensor data.
- Develop planning algorithms for service distribution.
- Pilot deployment of crowdsourcing and distribution algorithms.

