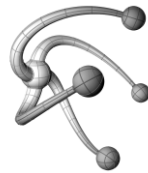


Applied Data Science

Smart Homes – 2

By: Benny Arana, Xiaodang Pan, Zhengyang Mao, Mariam Bee, Zhuolin Yang



Smart Homes - 2

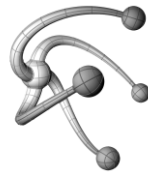
- Video – Annotations
- PIR – Locations
- Accelerations - RSSI



An EPSRC Interdisciplinary Research Collaboration (IRC)

Planning





We have completed

- Video

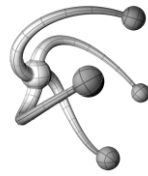


- Acceleration

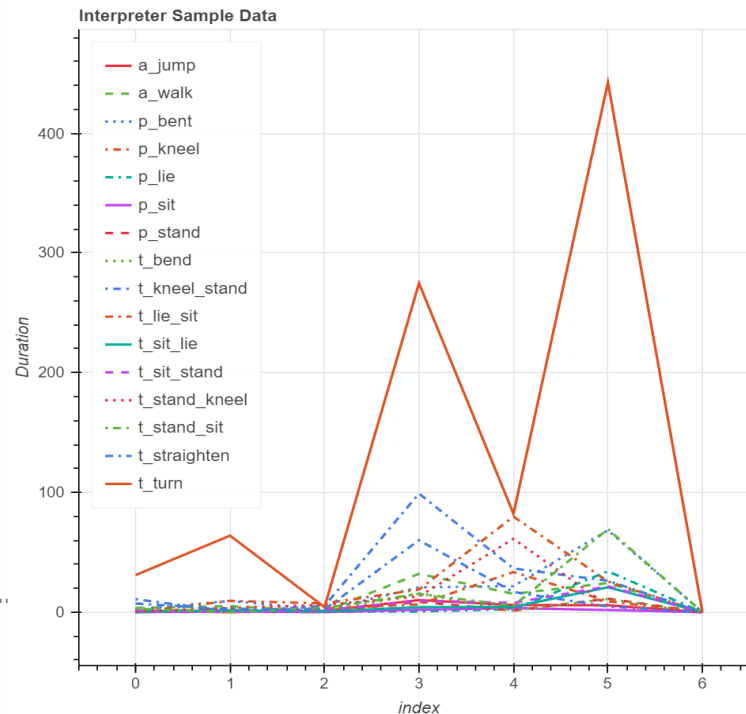
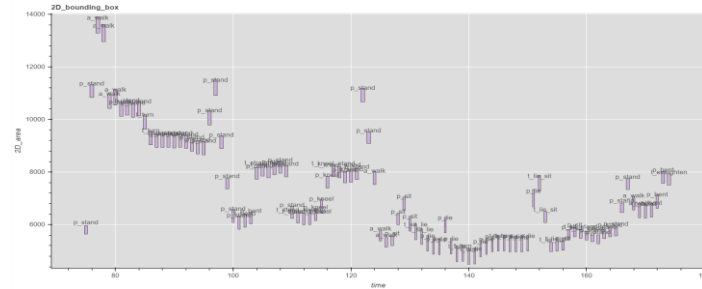
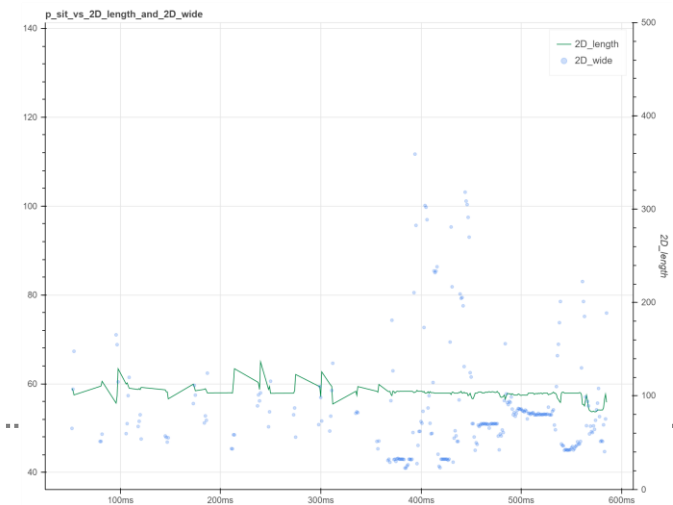
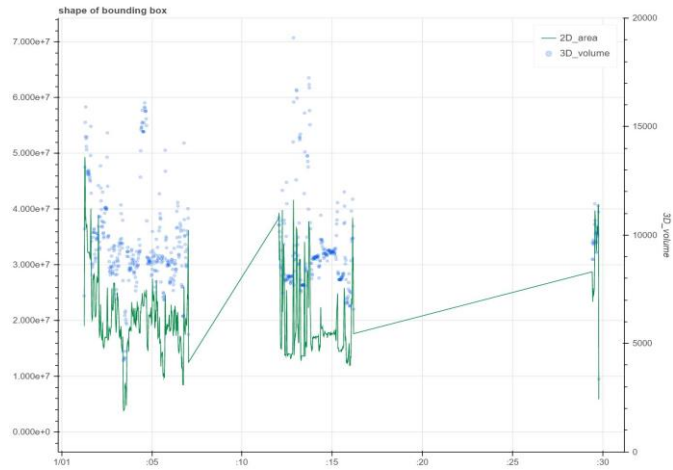


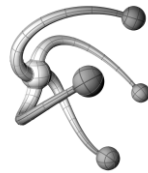
- PIR



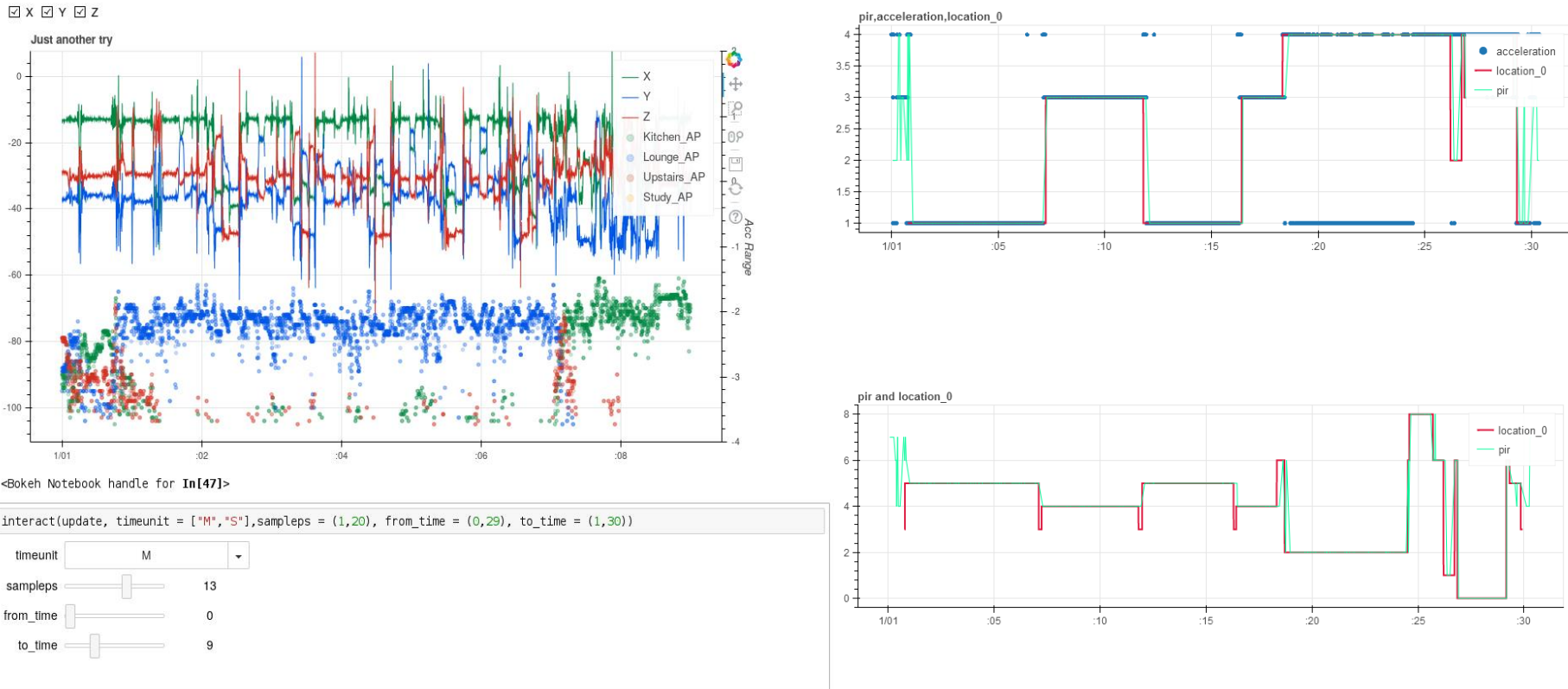


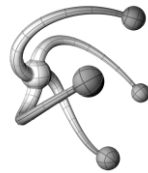
Preliminary Results—Video & Annotations





Preliminary Results – Acceleration & RSSI & Location & PIR



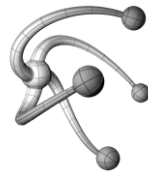


Challenges

- Missing value
- Resampling
- Timeline matching
- Exploration of MongoDB
- Finding libraries for visualization
- Finding a Hypothesis
- Python's Learning Curve

Future Work

- MongoDB
- Deployment – Docker/AWS
- Compare Activities & Location – Validation Rules
- Integration
- Hypothesis



Q & A

Thanks for listening!

