Integration of Social Behavioral Modeling for Smart Environments To Improve Energy Efficiency of Smart Cities
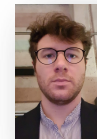
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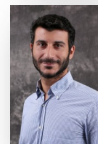**Hashem Sadeghiyeh**
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Description

Main Goals and Primary Tasks:

- Understand/model/predict social and **behavioral aspects** involved in human **interaction with smart residential environments**

- Design comprehensive framework for **energy management** considering **psychological dimensions** of user behavior

Methodology:

- Define social **behavioral models**

- Exploit **machine learning** to learn/refine models

- Perceived value-aware **energy management**

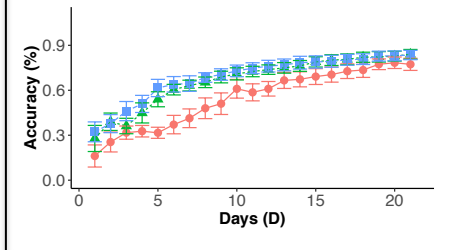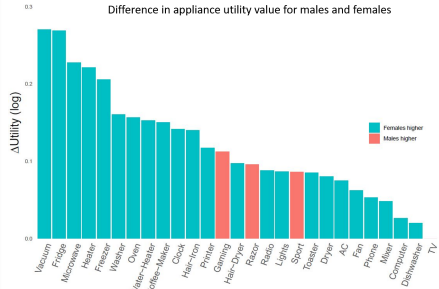- **Psychological factors** of efficacy and user engagement.

Simone Silvestri - 2019 CPS PI Meeting, Alexandria, VA
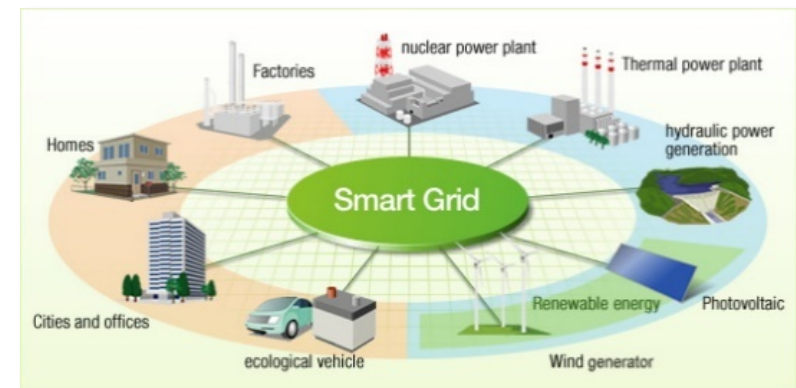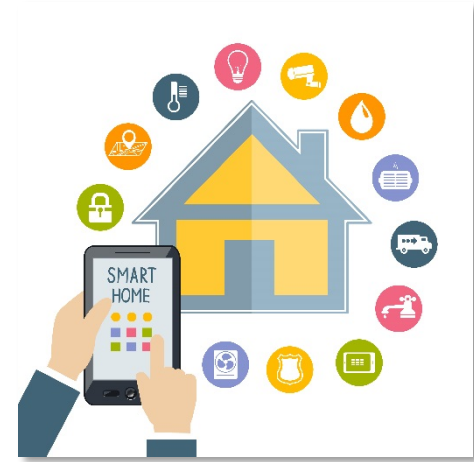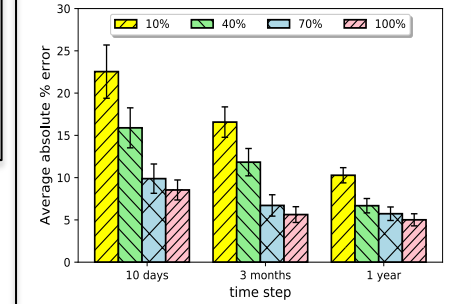
Findings

Demographic- Individual Differences

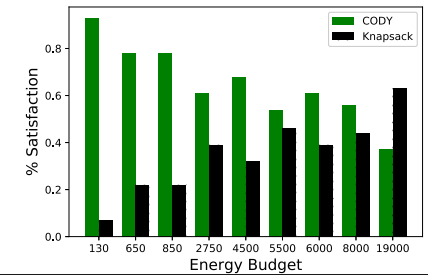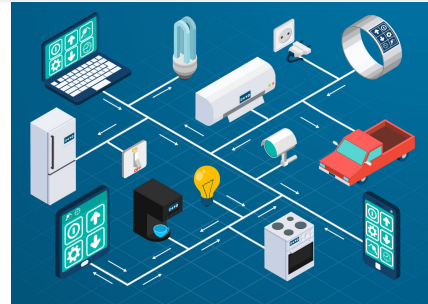**Active Learning Approach for Appliance Recognition**

User Perceived-Value Energy Management
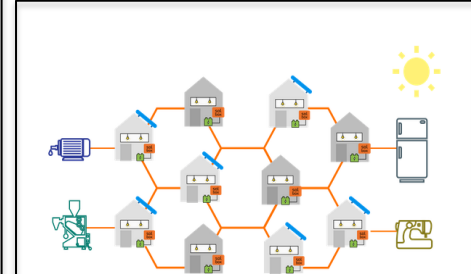
User-aware Energy Sharing System