

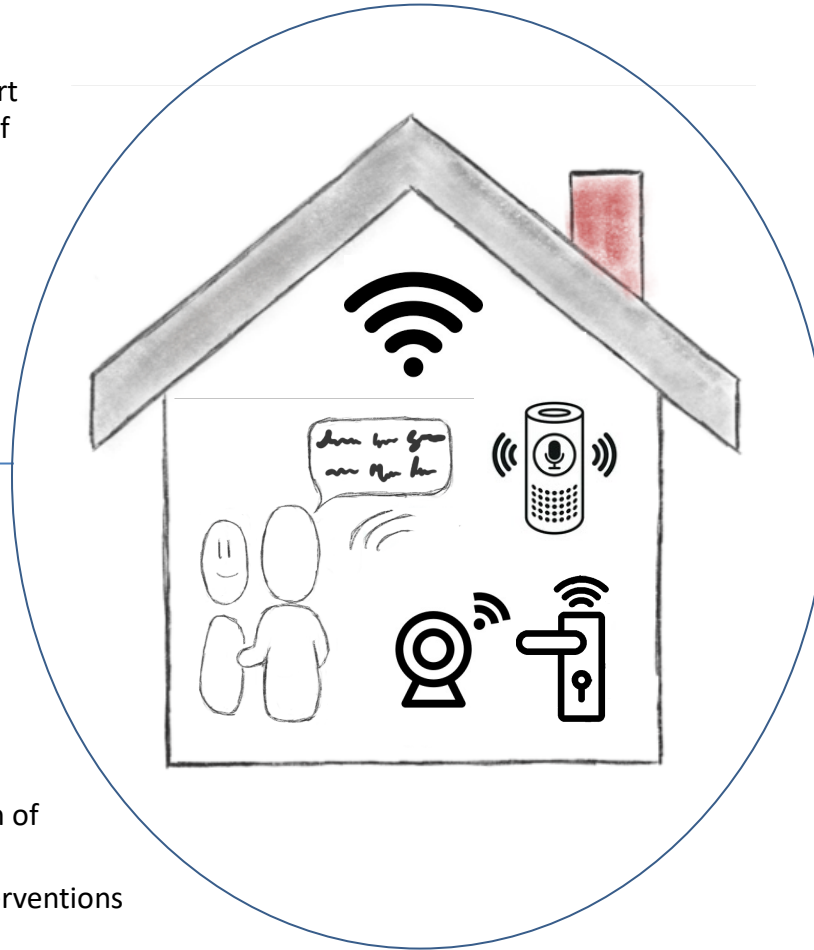
Foregrounding Bystanders as Stakeholders in Smart Home Product Design

Challenge:

- Individuals' choices to install smart home devices affect the privacy of many other people (cohabitants, visitors, domestic employees...)
- Protections for bystander privacy are limited by social norms and by how – or whether – smart home product teams choose to provide options

Solution:

- Identify privacy expectations of and tensions between smart home users and bystanders
- Prototype and evaluate interventions to give bystanders more control over data
- Assess knowledge and motivation of product teams
- Develop and test educational interventions and tools for product teams



Scientific Impact:

- Illuminate unique privacy considerations of bystanders
- Understand how social and economic disparities may amplify the privacy impacts of growth in smart homes/IoT
- Explore how products and development processes could attend to privacy beyond the immediate consumer

Broader Impact and Broader Participation:

- Provide models for how to build products that respect bystander privacy and agency
- Impact smart home designs by disseminating guidelines and training materials developed with input from product teams
- Build undergraduate research teams

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