Foregrounding Bystanders as Stakeholders in Smart Home Product Design

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Key Problems

Individuals' choices to install smart home devices affect the privacy of many other people

- Cohabitants, visitors, domestic employees...
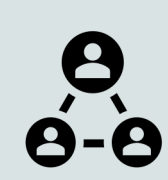
Protections for bystander privacy are limited by:

- *Social norms* around who makes choices about devices
- *Design choices* made by smart home product teams

Scientific Approach and Proposed Solutions

	Smart Home Users and Bystanders	**Smart Home Product Teams**
Conduct Surveys, Interviews, & Case Studies	*Identify privacy expectations and norms* of – and tensions between – smart home users and bystanders *Compare experiences* with, and privacy impacts of, smart homes across demographic groups	*Assess knowledge and motivation* of smart home product teams with regard to bystander privacy
Develop, Test, & Disseminate Interventions	*Prototype and evaluate interventions* to give bystanders better information and more control over data	*Develop and test experimental* 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 Impacts on Society

- 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

Broadening Participation

- Build undergraduate research teams