# CRAFTING QUALITY LAW AND POLICY FOR ROBOTICS

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https://tinyurl.com/jfcc2s63 https://tinyurl.com/ms6hr2c4

**Goal:** Bridge the gap between law and policy makers and roboticists by (1) Interactive experiences that build off of experiences with every-day technology to improve reasoning about potential robotic capabilities and failures (2) Narrative materials to illustrate how robotic technology design choices influence, and are accountable to, existing law and policy.

**Gap 1:** Lawmakers and policy experts often have a limited technical background, which hinders their ability to craft regulation and legislation that are both feasible and comprehensive.



**Gap 2:** Roboticists do not understand how law and policy are affected by (and affect) robot technology. This prevents them from making design decisions that take this into account.

**SCIENTIFIC IMPACT:** Provide a framework for establishing effective communication between law and policy and technology experts.

½ - 2 day interactive workshops for law and policy experts

Course module (1 week to full course) for existing robotics programs

Design robots with societal impacts in mind
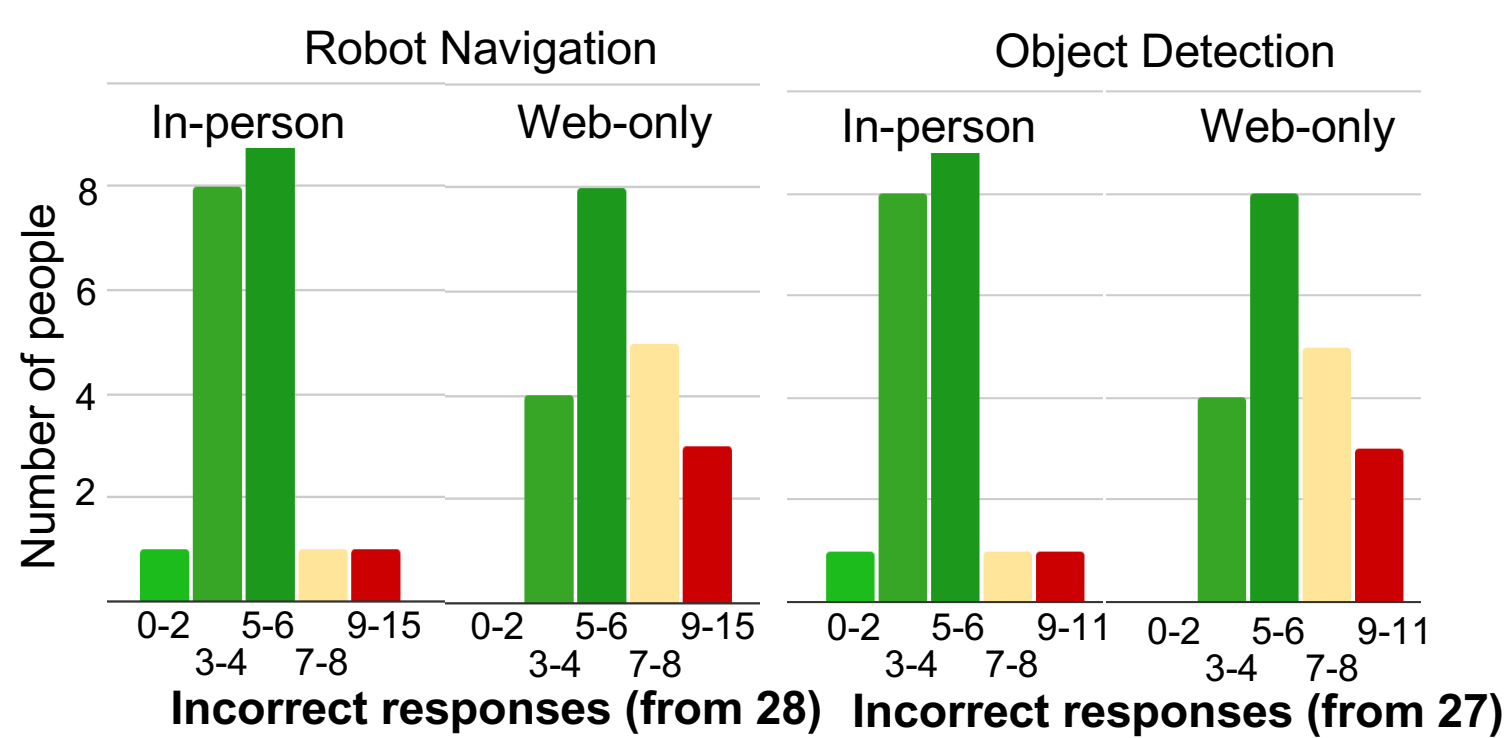


Interactive experiences to improve non-expert's ability to reason about technology capabilities and potential failures

- Navigation: Interacting with a "toy" robot improves participants ability to reason about localization errors [submitted IROS 2023]
- Object detection: People have a good model of how object detection fails through interacting with existing apps that use computer vision [submitted ROMAN 2023]
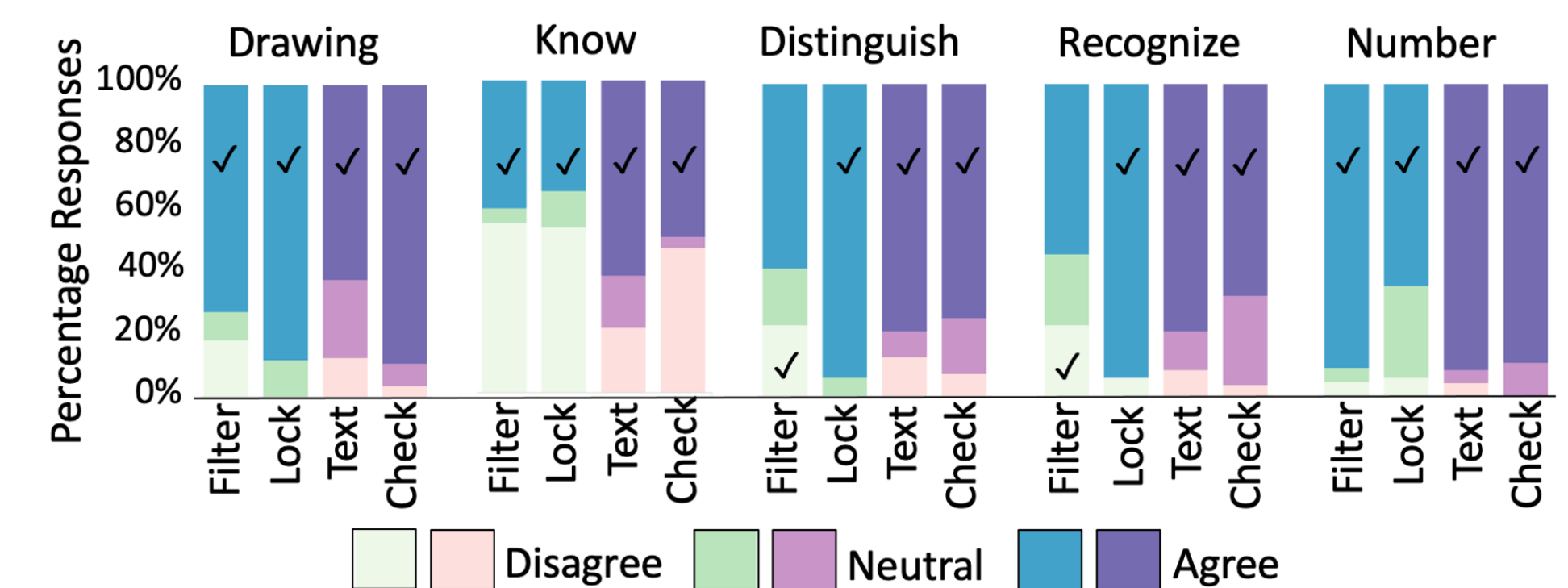


**IMPACT ON SOCIETY, on-going activities:**

Evaluating attitude towards, and understanding of, sidewalk robots at OSU

Use of interactive "skits" with a non-technical audience

Use of role playing cards/game to encourage all stakeholder evaluation of sidewalk robot policies

British Columbia Law Institute, Artificial Intelligence and Civil Liability Committee White Paper [Grimm]


Hospital model


IPad AR display (laser)

Robot


Object detection

Web cam