CRAFTING QUALITY LAW AND POLICY FOR ROBOTICS

Dr. Cindy Grimm, Dr. William Smart, Dr. Ross Sowell, Ruth West

http://web.engr.oregonstate.edu/~grimmc/content/talks/Rhodes2021/rhodes_fde_s21.pdf

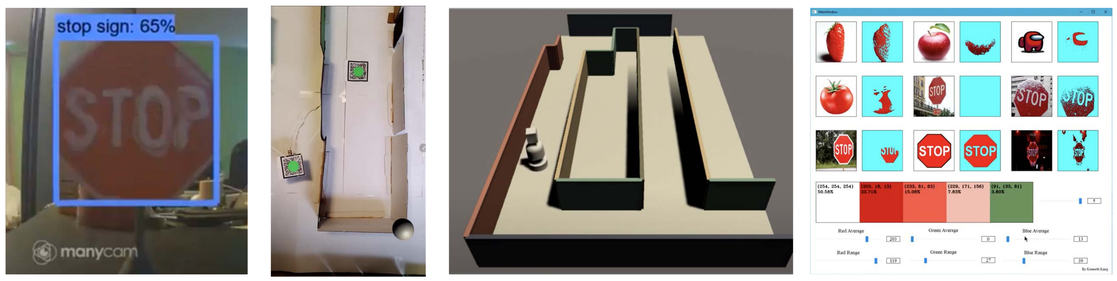
INTRODUCTION: Advances in robotics technology will bring more robots into our shared public spaces to perform a variety of tasks. This raises new challenges regarding the current ideas of legal regulation, public policy, and privacy. Therefore, new laws will have to be written to deal with robots in the world. Public policy will have to adapt to sharing our spaces with our new co-workers. New privacy protections and norms will have to be established.

CHALLENGE: 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.

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

CONTRIBUTION:

- Introduce a structured language paradigm to establish a clear mapping between robotic capabilities and legal questions.
- Open up the black box of robotic sensors, actuators, and algorithmic approaches.



APPROACH: 1) Experiences with existing technology + Interactive experiences, 2) Case-law approach, 3) Narrative based examples.

IMPACT ON SOCIETY:

- Creation of law and policy around robotics that align with technological capabilities.

IMPACT ON EDUCATION:

- Designing robotics research agendas in the context of the public and society
- Establishing best practices in educating non-technical people about robotic capabilities

IMPACT QUANTIFICATION

- Improved shared communication between roboticists and law and policy makers
- Increased public awareness about actual robotics capabilities and limitations

2021 NRI & FRR Principal Investigators' Meeting
March 10-12, 2021

Award ID#: 2024872