

Abhi.jpg



About Me.

I do Human-Robot Interaction research, being at the intersection of UX, research and engineering. I like to create and explore. I help discover ways that robots can solve problems for people as well as finding ways for robots and humans to have natural, intelligent, and enjoyable interactions.

Education.

- **Oregon State University**
MS in Robotics
2017 - 2019
- **Indian Institute of Technology Patna**
B. Tech in Mechanical Engineering
2013 - 2017

Skills.

CONTEXTUAL INQUIRY USER INTERVIEWS LATEX
USABILITY STUDIES FOCUS GROUPS SKETCHING
ADOBE CREATIVE SUITE SOLIDWORKS
JAVASCRIPT HTML CSS WEBGL NODEJS
PYTHON C/C++ OPENCV PYTORCH, TENSORFLOW
ROS, GAZEBO DRAKE RAPID PROTOTYPING
ADDITIVE MANUFACTURING LASER CUTTING

Interests.

Human robot interaction, Design of Social Robots & Robot Personality, Developing Personalized & Interactive Autonomous Systems

Music: playing, composing, production
Storytelling: sketching, video production

Outdoors: running, hiking, rowing

f1tenth: 1/10th scaled f1cars - organizer and enthusiast



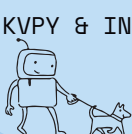
Misc.

HRI 2021 Accessibility co-chair.
HRI, RoMan, ICRA, CHI, ITSC reviewer.
Second Best Paper SIGCSE 2020.
HRI-Pioneer 2019.

Outstanding Undergraduate Thesis Award.

KVPY & INSPIRE Scholarship awardee.


Conan O'Brien hosted me on his podcast for ROBOTS!!




Work Experience.

Toyota Research Institute  June 2019 - Present


UX DEVELOPER I design, program and create prototypes that explore human robot interaction while working closely with other technical robotics subteams and collaborators. One of my active public projects is 'Punyo,' where we are trying to make a soft robot just like Baymax!

GoogleX Robotics  Summer 2018

UX RESEARCH INTERN Worked at Everyday Robots project, I developed software and designed robotic applications, worked on robot manipulation, and designed human-robot-interaction experiments.

Stanford University  Summer 2016

UX RESEARCH INTERN Interactive Social Robots: Implemented autonomous and human-in-the-loop control of multiple robotic chairs and lamps, also analyzed expressivity of robot motor sounds. Grrr...!

New York University  Summer 2015


ROBOTICS INTERN Interactive Robotic Manipulator: Built a 3D vision-based feedback control system to recognize and localize objects in the environment.

Selected Publications + Patents.

Full list on  scholar

“Input devices having a deformable membrane and methods of using the same”, US Patent. July 2022.

“How Does the General Population Understand Robot State?”, in International Conference on Human-Robot-Interaction (HRI). March 2021.

“Teaching Autonomous Systems at 1/10th scale: Design of the F1/10 Racecar, Simulators and Curriculum”, in Technical Symposium on Computer Science Education (SIGCSE). March 2020. 

“Distinguishing Robot Personality from Motion”, in International Conference on Human-Robot-Interaction (HRI). March 2020.

“Persuasive ChairBots: A (Mostly) Robot-Recruited Experiment”, in International Conference on Robot & Human Interactive Communication

Contact!