

Gopika Ajaykumar

The Johns Hopkins University
Department of Computer Science
Email: gopika@cs.jhu.edu
Website: <https://www.cs.jhu.edu/~gopika>

Education

- 2018 - present **PhD in Computer Science**
The Johns Hopkins University
Advisor: Chien-Ming Huang
- 2021 **MS in Computer Science**
The Johns Hopkins University
- 2015 - 2018 **BS in Electrical and Computer Engineering**
The University of Texas at Austin

Honors & Awards

- 2019 Inaugural Engineering/Nursing Joint Fellowship, *The Johns Hopkins University*
- 2018 Howard and Jacqueline Chertkof Endowed Fellowship, *The Johns Hopkins University*
- 2018 National Science Foundation Graduate Research Fellowship
- 2018 Graduating Honors, *The University of Texas at Austin*
- 2018 Roberto Rocca Scholarship, *Tenaris*
- 2017 Braden Communication Scholarship, *The University of Texas at Austin*
- 2015 - 2017 University Honors, *The University of Texas at Austin*

Research Experience

- 2018 - present Graduate Researcher, **Intuitive Computing Laboratory**
The Johns Hopkins University
- 2017 - 2018 Undergraduate Research Assistant, **Nuclear and Applied Robotics Group**
The University of Texas at Austin
- 2016 Undergraduate Researcher, **Rockwell Automation Laboratory**
Texas A&M University

Publications

JOURNAL ARTICLES

- 2021 **G. Ajaykumar, M. Stiber, and C.-M. Huang.**
“Designing User-Centric Programming Aids for Kinesthetic Teaching of Collaborative Robots”
Robotics and Autonomous Systems

2021 **G. Ajaykumar**, M. Steele, and C.-M. Huang.
“A Survey on End-User Robot Programming”
ACM Computing Surveys (CSUR)

PEER-REVIEWED CONFERENCE FULL PAPERS

2020 J. Han*, **G. Ajaykumar***, Z. Li, and C.-M. Huang.
“Structuring Human-Robot Interactions via Interaction Conventions”
In *Proceedings of the 29th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN’20)* *equal contribution

2020 Y. Wang, **G. Ajaykumar**, and C.-M. Huang.
“See What I See: Enabling User-Centric Robotic Assistance Using First-Person Demonstrations”
In *Proceedings of the 2020 ACM/IEEE International Conference on Human-Robot Interaction (HRI’20)*
Acceptance Rate: 24%

DOCTORAL CONSORTIA

2021 **G. Ajaykumar**.
“Assisted End-User Robot Programming”
In *Proceedings of the 23rd ACM International Conference on Multimodal Interaction (ICMI’21)*

PEER-REVIEWED WORKSHOP AND CONFERENCE SHORT PAPERS

2021 A. Mahmood, **G. Ajaykumar**, and C.-M. Huang.
“How Mock Model Training Enhances User Perceptions of AI Systems”
2021 NeurIPS Workshop on Human-Centered AI

2021 **G. Ajaykumar** and C.-M. Huang.
“Multimodal Robot Programming by Demonstration: A Preliminary Exploration”
2021 RSS Workshop on Accessibility of Robot Programming and the Work of the Future

2021 **G. Ajaykumar**, A. Mao, J. Brown, and C.-M. Huang.
“FACT: A Full-body Ad-hoc Collaboration Testbed for Modeling Complex Teamwork”
2021 ICRA Workshop on Social Intelligence in Humans and Robots

2020 **G. Ajaykumar** and C.-M. Huang.
“User Needs and Design Opportunities in End-User Robot Programming”
2020 HRI Late-Breaking Report

Teaching Experience

Fall 2019 Teaching Assistant, EN.601.490/690 **Introduction to Human-Computer Interaction**
Department of Computer Science, The Johns Hopkins University

Professional Service

CONFERENCE PAPER REFEREE

2021 International Conference on Human-Robot Interaction (HRI)

2020 International Symposium on Robot and Human Interactive Communication (RO-MAN)
2019 International Conference on Human-Robot Interaction (HRI)

JOURNAL ARTICLE REFEREE

ACM Transactions on Human-Robot Interaction

OUTREACH

2019 Girl Scouts Robotics Workshop Speaker, *Designing Robots That Help People*
Maryland Science Center, Baltimore, MD