

# Raj Korpan

## Curriculum Vitae

Hunter College, City University of New York (CUNY)

[Google Scholar Trustworthy, Intelligent, and Explainable Robotics Lab Website](#)

### EDUCATION

- 2021 Ph.D. in Computer Science, Graduate Center, City University of New York  
Thesis: Metareasoning, Opportunistic Exploration, and Explanations for Autonomous Indoor Navigation
- 2015 M.S. in Statistics, Baruch College, City University of New York
- 2010 B.S. in Economics & Finance, Bentley University

### ACADEMIC APPOINTMENTS

- 2023-present Assistant Professor, Department of Computer Science, Hunter College, CUNY
- 2024-present Doctoral Faculty, Computer Science and Data Science, Graduate Center, CUNY
- 2021-2023 Assistant Professor, Department of Computer Science, Iona University
- 2017-2021 Adjunct Instructor, Department of Computer Science, Hunter College, CUNY
- 2015-2021 Graduate Research Assistant, ML & Problem Solving Lab, Hunter College, CUNY
- 2014-2015 Graduate Assistant, Statistical Consulting Laboratory, Baruch College, CUNY

### PUBLICATIONS

#### Journal and Magazine Articles

- 2024 Korpan, Raj, Ray, Ruchira, Sipos, Andrea, Dennler, Nathan, Parks, Max, Cabrera, Maria E., and Martín-Martín, Roberto. Launching Queer in Robotics. *IEEE Robotics & Automation Magazine*. Volume 31, Issue 2.
- 2023 Williams, Tom, Matuszek, Cynthia, Jokinen, Kristiina, Korpan, Raj, Pustejovsky, James, and Scassellati, Brian. Voice in the Machine: Ethical Considerations for Language-Capable Robots. *Communications of the ACM*. Volume 66, Issue 8.

#### Conferences

- 2024 Korpan, Raj, Eguchi, Amy, Han, Zhao, Ostrowski, Anastasia K., Ravindranath, Sindhu, and Tanevska, Ana. 3rd Workshop on Inclusive HRI: Equity and Diversity in Design, Application, Methods, and Community. In *Companion of the 2024 ACM/IEEE International Conference on Human-Robot Interaction (HRI '24)*. Association for Computing Machinery, New York, NY, USA.
- 2023 Ovalle, Anaelia, Subramonian, Arjun, Singh, Ashwin, Voelcker, Claas, Sutherland, Danica J., Locatelli, Davide, Breznik, Eva, ..., Korpan, Raj, et al. Queer In AI: A Case Study in Community-Led Participatory AI. In *Proceedings of the ACM Conference on Fairness, Accountability, and Transparency (FAccT 2023)*. **(Best Paper Award Winner)**
- 2023 Tanevska, Ana, Chandra, Shruti, Barbareschi, Giulia, Eguchi, Amy, Han, Zhao, Korpan, Raj, Ostrowski, Anastasia K., Perugia, Giulia, Ravindranath, Sindhu, Seaborn, Katie, and Winkle, Katie. Inclusive HRI II: Equity and Diversity in Design, Application, Methods, and

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- Community. In *Companion of the 2023 ACM/IEEE International Conference on Human-Robot Interaction (HRI '23)*. Association for Computing Machinery, New York, NY, USA.
- 2021 Korpan, Raj, and Epstein, Susan L.. Hierarchical Freespace Planning for Navigation in Unfamiliar Worlds. In *Proceedings of the 31st International Conference on Automated Planning and Scheduling (ICAPS 2021)*.
- 2019 Epstein, Susan L., and Korpan, Raj. Planning and Explanations with a Learned Spatial Model. In *Proceedings of the 14th International Conference on Spatial Information Theory (COSIT 2019)*, Regensburg, Germany.
- 2018 Aroor, Anoop, Epstein, Susan L., and Korpan, Raj. Online Learning for Crowd-sensitive Path Planning. In *Proceedings of the 17th International Conference on Autonomous Agents and Multiagent Systems, AAMAS 2018*, Stockholm, Sweden, International Foundation for Autonomous Agents and Multiagent Systems. **(Best Robotics Paper Award Nominee)**

## Workshops and Symposia

- 2024 Korpan, Raj. Towards a Participatory and Social Justice-Oriented Measure of Human-Robot Trust. In *Notes from the 2024 Workshop on Trust in Human-Robot Interaction (HRI 2024)*.
- 2023 Korpan, Raj. VBMO: Voting-Based Multi-Objective Path Planning. In *Notes from the First International Workshop on Search and Planning with Complex Objectives (IJCAI 2023)*.
- 2023 Korpan, Raj. Trust in Queer Human-Robot Interaction. In *Notes from the SCRITA 2023 Workshop on Trust, Acceptance and Social Cues in Human-Robot Interaction (IEEE RO-MAN 2023)*.
- 2021 Korpan, Raj, and Epstein, Susan L.. Contrastive Natural Language Explanations for Multi-Objective Path Planning. In *Proceedings of the International Workshop of Explainable AI Planning (XAIP) (ICAPS 2021)*.
- 2021 Korpan, Raj, and Epstein, Susan L.. Plan Explanations that Exploit a Cognitive Spatial Model. In *Proceedings of the Second International Combined Workshop on Spatial Language Understanding and Grounded Communication for Robotics (ACL-IJCNLP 2021)*.
- 2020 Epstein, Susan L., and Korpan, Raj. Metareasoning and Path Planning for Autonomous Indoor Navigation. In *Proceedings of the Workshop on Integrated Execution (IntEx) / Goal Reasoning (GR) (ICAPS 2020)*.
- 2018 Korpan, Raj, and Epstein, Susan L. Toward Natural Explanations for a Robot's Navigation Plans. In *Notes from the Workshop on Explainable Robotic Systems (HRI 2018)*, Chicago, IL.
- 2017 Korpan, Raj, Epstein, Susan L., Aroor, Anoop, and Dekel, Gil. WHY: Natural Explanations from a Robot Navigator. In *Proceedings of AAAI Fall Symposium on Natural Communication for Human-Robot Collaboration*, Arlington, VA.
- 2017 Aroor, Anoop, Epstein, Susan L., and Korpan, Raj. MengeROS: A Crowd Simulation Tool for Autonomous Robot Navigation. In *Proceedings of AAAI Fall Symposium on Artificial Intelligence for Human-Robot Interaction*, Arlington, VA, AAAI.

## Preprints

- 2024 Kennington, Casey, Alikhani, Malihe, Pon-Barry, Heather, Atwell, Katherine, Bisk, Yonatan, Fried, Daniel, Gervits, Felix, Han, Zhao, Inan, Mert, Johnston, Michael, Korpan,

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- Raj, et al. Dialogue with Robots: Proposals for Broadening Participation and Research in the SLIVAR Community. *arXiv preprint arXiv:2404.01158*.
- 2020 Korpan, Raj, and Epstein, Susan L. Deliberate Exploration Supports Navigation in Unfamiliar Worlds. *arXiv preprint arXiv:2007.00798*.

## RESEARCH GRANTS

### Awarded

- 2023 PSC-CUNY Award Program, Research Foundation of CUNY  
Title: Cognitively-Based Social Robot Navigation  
Role: Principal Investigator

## HONORS AND AWARDS

- 2024 2023-2024 Hunter Travel Award, Hunter College, CUNY
- 2023 Student-Faculty Research Initiative Award, Hunter College, CUNY
- 2023 Best Paper Award, ACM Conference on Fairness, Accountability, and Transparency
- 2022 Upsilon Pi Epsilon, the International Computer Science Honor Society, Iona University
- 2022 Commencement Speaker, Graduate Center, CUNY
- 2021 Graduate Center Dissertation Showcase Award, Graduate Center, CUNY
- 2018 Doctoral Student Research Grant, Graduate Center, CUNY
- 2018 Dr. Lennihan Arts & Sciences Grant, Graduate Center, CUNY
- 2017 Ernesto Malave Merit Scholarship, University Student Senate, CUNY
- 2015 Award for Excellence in Statistics, Baruch College, CUNY

## INVITED TALKS AND PANELS

### Invited Talks

- 2024 “AI’s Impact on LGBT+ Communities: Challenges and Opportunities”  
Challenges of Artificial Intelligence Series, VoteLGBT
- 2024 “Bias and Ethics in AI”  
ACERT Lunchtime Seminar, Hunter College, CUNY
- 2024 “Advancing Public Interest Technology: Inclusive Robotics & Artificial Intelligence”  
Public Interest Tech Gathering, Fordham University
- 2024 “An Identity-focused Computer Science Capstone”  
BMCC/Hunter Faculty Seminar Series on Asian American Students in the City
- 2024 “Pedagogical Strategies for the Senior Capstone: Bridging Knowledge and Practice”  
CUNY Teaching & Learning Conference
- 2024 “Facilitating Positive Teamwork Experiences”  
ACERT Teaching Innovations Lightning Talks, Hunter College, CUNY
- 2022 “Queer in AI: Cultivating a Minority Community in your Profession”  
Diversity Conference, Iona University

### Panels

- 2024 “How AI is impacting the LGBTQIA+ Community”, NYC Tech Hub, Mastercard
- 2024 “Pride in Science”, oSTEM, Mount Sinai Icahn School of Medicine

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2023 ChatGPT Faculty Panel, Iona University

## PROFESSIONAL SERVICE

### Leadership

2024-present Nonresident Fellow, Center for Technology Innovation, Brookings Institution

2023-present Founding Organizer, Queer in Robotics

2022-present Core Organizer, Queer in AI

### Workshops and Events Organized

2024 3rd Workshop on Inclusive HRI, ACM/IEEE International HRI Conference

2024 Queer in Robotics Social Event, ACM/IEEE International HRI Conference

2023 Queer in Robotics Welcome Event, IEEE/RSJ International IROS Conference

2023 Data Science Symposium, Iona University

2023 Inclusive HRI II Workshop, ACM/IEEE International HRI Conference

2022-2023 Queer in AI Event, Diversity and Inclusion Program, AAAI Conference

2022 Queer in AI Event, Diversity and Inclusion Activities, International AAMAS Conference

### Program Committee

2024 Area Chair, International Conference on Computational Linguistics (COLING)

2024 International Symposium on Technological Advances in HRI (TAHRI)

### Reviewer

2024 National Science Foundation Review Panels

2024 ACM Transactions on Human-Robot Interaction

2024 IEEE Transactions on Cognitive and Developmental Systems

2024 International Conference on Human-Robot Interaction (HRI)

2024 Interpretable AI Workshop at NeurIPS

2024 International Conference on Automated Planning and Scheduling (ICAPS)

2018-2024 Cognitive Science Conference (CogSci)

2022-2024 Queer in AI Workshop at ACL & NAACL

2023-2024 NeurIPS

2023 XAI in Action Workshop at NeurIPS

2019, 2021 International Conference on Robotics and Automation (ICRA)

### Volunteer Work

2024-present CRA Working Group on New Opportunities in Socially Responsible Computing

2024-present Building Inclusive Public Interest Technology Learning Competencies

2024-present Responsible AI Curriculum Taskforce, All Tech is Human

2023 Dialogue with Robots Workshop, University of Pittsburgh

2021-2022 Spoken Language Interaction with Virtual Agents and Robots Workshop Series

2016 Student Volunteer, International Joint Conference on Artificial Intelligence (IJCAI)

2016 Student Volunteer, International Conference on Machine Learning (ICML)

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## **UNIVERSITY SERVICE**

### **Search Committees**

2021-2022 Computer Science Faculty Search Committee, Iona University  
2021 Provost Search Committee, Graduate Center, CUNY  
2019 President Search Committee, Graduate Center, CUNY

### **Faculty Representation**

2024-present Writing Task Force, Hunter College, CUNY  
2024-present ACERT Faculty Writing Group Organizer, Hunter College, CUNY  
2024-present Hunter College AANAPISI Project Advisory Committee  
2024-present Graduate Council, Graduate Center, CUNY  
2023-present Hunter College Senate, Hunter College, CUNY  
2022-2023 Faculty Senate, Iona University  
2022-2023 Committee on Academic Affairs, Iona University  
Chair, Transfer Credit Policy Subcommittee (2023)  
Chair, Bylaws and Procedures Subcommittee (2022)  
2021-2022 ABET Accreditation Committee, Iona University  
2022 Core Curriculum Assessment Committee, Iona University  
2022 Academic Standing Committee, Iona University

### **Student Activity Organization**

2024 Robotics Innovation Challenge, Borough of Manhattan Community College, CUNY  
2021-2023 Co-moderator, Computer Science Student Club, Iona University

### **Student Organization Leadership**

2018-2020 Co-Chair for Business, Doctoral & Graduate Students' Council, Graduate Center, CUNY  
2016-2019 Treasurer, Computer Science Students' Association, Graduate Center, CUNY  
2017-2018 Officer for Funding, Doctoral & Graduate Students' Council, Graduate Center, CUNY  
2014-2015 Founder and Treasurer, Baruch Graduate Pride Society, Baruch College, CUNY

### **Student Representation**

2020-2021 Budget Committee, Graduate Center, CUNY  
2018-2021 Faculty/Student Disciplinary Panel, Graduate Center, CUNY  
2018-2021 Student Academic Appeals Committee, Graduate Center, CUNY  
2020-2021 Executive Committee, Computer Science Department, Graduate Center, CUNY  
Also served: 2016, 2017-2018  
2020-2021 Student Technology Fee Committee, Graduate Center, CUNY  
Also served: 2016-2018  
2016-2021 Doctoral & Graduate Students' Council, Graduate Center, CUNY  
Grants Committee (2016-2021, Chair: 2017-2018)  
Constitution and Bylaws Committee (2018-2020)  
Governance Task Force (2016-2017, 2018-2020)  
Committee for Gender Neutral Bathrooms (2015-2016)  
2016-2021 Graduate Council, Graduate Center, CUNY

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Curriculum and Degrees Committee (2017-2021)

Committee on Committees (2018-2020)

Information Technology Committee (2017-2019)

2020 Middle States Accreditation Site Visit, Graduate Center, CUNY

2019 Strategic Planning and Implementation Committee, Graduate Center, CUNY

## **COMMUNITY SERVICE, MEDIA, AND PROFESSIONAL DEVELOPMENT**

### **Community Service**

2024 Mentor, Leonetti/O'Connell Honors Research in Science Program, Marlborough School

2024 Coach, CSGrad4US Fellowship Program

2024 Mentor, Macaulay Honors College Datathon

2017-2024 Terra New York City STEM Fair

Head Judge for Software and Robotics (2023-2024)

Volunteer Judge (2017, 2019, 2021-2024)

2023 Level Up Workshop on inclusive undergraduate computing education

2023 Judge, CUNY Tech Prep Hackathon

2022 Lecture on “Cognition, Artificial Intelligence, and Robotics: Can we create machines that think, reason, and learn?” at Learning in Retirement at Iona College (LIRIC)

2021 Mentor, Iona University MOSAIC Mentorship Program

### **Media Coverage**

2024 The Foreign Press Podcast, “AI’s Transformative Potential: Bridging Technology and Ethics”, Association Foreign Press Correspondents in the USA

2024 TechTank Podcast, “Creating queer inclusive research and experiences in AI”, The Brookings Institution

2024 Empire AI Roundtable with Governor Kathy Hochul

2024 One to One with Sheryl McCarthy, “Future of AI: Embrace or Fear?”, CUNY TV

### **Professional Development**

2024 Grants 101 Bootcamp, ASRC, CUNY

2024 CRA Career Mentoring Workshops on Teaching and Research

2024 BMCC/Hunter Faculty Seminar Series: Asian American Students in the City

2024 Broader Impacts Writing Workshop, City College, CUNY

2021 Anti-Racism Teaching and Learning Workshop, Iona University

2017 Data on the Mind Workshop, University of California, Berkeley

2017 Summer School on Cognitive Robotics, Massachusetts Institute of Technology (MIT)

## **STUDENT RESEARCH AND ADVISING**

### **Doctoral Committees**

2024 Dissertation: “la VIDA: Towards a Motivated Goal Reasoning Agent”

Ursula Addison, Graduate Center, CUNY

### **Graduate Student Research**

2024-present Doctoral Student Advisor, Daniel Weiner, Graduate Center, CUNY

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2022-2023 Masters Thesis: “Using Heart rate and Emotion Recognition to Identify True Emotions”  
Eliza Verghese, Iona University

## Undergraduate Student Research

Project: “Effectiveness of Explanations on Understanding Robot Behavior”

2024-present Daniel Tiourine, Hunter College, CUNY

2024 Sami Chen, Hunter College, CUNY

Poster at Hunter College Undergraduate STEM+ Research Conference (2024)

Poster at CUNY Undergraduate Research Celebration Day (2024)

Project: “Social Robot Navigation in Unfamiliar Human-Centric Environments”

2024-present Georgina Woo and Eric Guan, Hunter College, CUNY

2024 Isaac Waters, Jessie Lin, and Anthony Pinales, Hunter College, CUNY

Poster at Hunter College Undergraduate STEM+ Research Conference (2024)

Project: “Voting-based Multi-Objective Path Planning Algorithms”

2023-present Daniel Merino, Hunter College, CUNY

Project: “Trust and Deception in Human-Robot Interactions”

2024-present Leah Kelley, Hunter College, CUNY

Project: “Perceptions of Social Robot Design”

2024-present Kelly Lin, Hunter College, CUNY

Project: “Consciousness in Large Language Models” and “Algorithmic Bias in Criminal Justice”

2024 Rodney Daniel, Saim Imran, and Bryant Zheng, Hunter College, CUNY

2022-2023 Honors Thesis Proposal: “Classifying Basketball Strategies with Machine Learning”  
Melville Lipton, Iona University

2021-2023 Honors Thesis: “Supervised Text Simplification with Aspect Extraction”  
Sergey Karpov, Iona University

2021-2022 Honors Thesis: “NorthApp: A Mobile Indoor Navigation Application”  
Brandon Gianni, Iona University

## TEACHING EXPERIENCE

### Hunter College, CUNY

Advanced Applications: Capstone for Majors (2020, 2021, 2023, 2024)

Introduction to Robotics (2024)

Supervised Research (2024)

Introduction to Computer Science Honors Recitation (2024)

Computers and Money (2017, 2018, 2019, 2020)

Introduction to Computer Science (2020)

Discrete Structures Recitation (2018)

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## **Iona University**

Data Structures and Algorithms (2021, 2022, 2023)  
Software Project Development: Implementation (2023)  
Theory of Programming Languages (2023)  
Software Project Development: Design (2022)  
Data Mining (2022)  
Data Science and Society (2022)  
Computer Science I (2021)  
Computers, Technology and Society (2021)

## **CURRICULUM DEVELOPMENT**

- 2024 Developed a course enhancement for Advanced Applications: Capstone for Majors to focus on tech for good, student identity, community technology, and ethics, Hunter College, CUNY
- 2023 Developed a novel project-oriented and interdisciplinary introduction to computer science course aimed at humanities and social science students, Iona University
- 2022 Developed and implemented a new introductory data science course aimed at non-major freshmen, Iona University

## **NON-ACADEMIC WORK**

- 2013-2015 Technology and Financial Consultant
- 2012-2013 Technology Associate, Global Investment Banking Technology, JPMorgan Chase
- 2010-2012 Operations Analyst, Commercial Loan Operations & Technology, JPMorgan Chase
- 2008, 2009 Intern, Corporate Finance Operations, CIT Group

## **MEMBERSHIP IN PROFESSIONAL SOCIETIES**

- 2017-present Association for the Advancement of Artificial Intelligence (AAAI)
- 2016-present Cognitive Science Society
- 2015-present IEEE
- 2014-present Association for Computing Machinery (ACM)
- 2014-2022 American Statistical Association (ASA)