

EDUCATION	University of Rochester Ph.D. in Computer Science Advisor: Dr. Zhen Bai	Expected December 2026
	University of Rochester M.S. in Computer Science Advisor: Dr. Ehsan Hoque	May 2023
	Rochester Institute of Technology Bachelor of Science, Computer Science - <i>Cum Laude</i> Minor: Mathematics Full Time Research: Fall 2019, Spring 2018	May 2020
	RESEARCH EXPERIENCE	
	ROCHCI Group - Dr. Zhen Bai University of Rochester, Rochester, NY - Building novel interfaces for behavior modeling to support language learning (English and American Sign Language) and parent-child interactions. - Developed Machine Learning and Computer Vision methods for predicting the diagnostic probability and severity of Movement Disorders (Parkinson's disease and Ataxia).	June 2020 - Present
	Future Interfaces Group - Dr. Chris Harrison Carnegie Mellon University, Pittsburgh, PA - Created visual processing pipelines with raw sensor data (Infrared and RGB cameras), for modeling human motion interaction, beyond their theoretical 3 meter limit. - Resulting Publication won best paper award at ACM SUI Conference	May 2020 - April 2021
	Independent Study - Dr. Christopher Homan Rochester Institute of Technology, Rochester, NY - Built deep learning models to understand how behavior spreads between user connections on social media sites and implemented an embedding scheme to train a deep learning model with the additional context of the user's mental state when posting online. - Independent Study: Autumn 2017, Autumn 2018, Spring 2019 - Full Time Research (Co-Op): Autumn 2019	September 2017 - August 2020
	MIT Summer Research Program - Dr. Alex Pentland Massachusetts Institute of Technology Media Laboratory, Cambridge, MA Created a decentralized auditing tool for a data privacy protocol (OPAL) and designed a case study system that used the protocol with the Argos Simulation software for robot based inference.	Summer 2019
	NASA Jet Propulsion Laboratory - Dr. Adrian Stoica California Institute of Technology, Pasadena, CA	Summer 2018

- Designed and implemented a deep learning model in Tensorflow for predicting seismic movements over a time series and modeling Human-Robot Interactions

MIT Summer Research Program - Dr. Andrew Lippman Summer 2017
Massachusetts Institute of Technology Media Laboratory, Cambridge, MA

- Worked in the Viral Communications group on applications of cryptocurrencies and using text analysis algorithms to discern bias in news articles

Future Everyday Technology Research Lab - Dr. Daniel Ashbrook
Rochester Institute of Technology, Rochester, NY May 2016 - June 2018

- Used statistical machine learning and audio analysis techniques for sound based interaction and measurement with materials of varying attributes.
- Independent Study: Summer 2016, Autumn 2016, Spring 2017, Autumn 2017
- Full Time Research (Co-Op): Spring 2018

**PEER
REVIEWED
CONFERENCE
PAPERS**

James Spann, Sarah A. Chen, Tetsuo Ashizawa, Ehsan Hoque. **Getting on the Right foot: Using observational and quantitative methods to evaluate movement disorders** *Proceedings of the 29th ACM Conference on Intelligent User Interfaces (ACM IUI)*, 2024

Vivian Shen, **James Spann**, Chris Harrison. **FarOut: Extending the Range of ad hoc Touch Sensing with Depth Cameras** *Proceedings of the ninth ACM Symposium on Spatial User Interaction (ACM SUI)*, 2021 [Best Paper Award]

Md. Kamrul Hasan, **James Spann**, Masum Hasan, Md. Saiful Islam, Kurtis Haut, Rada Mihalcea, Ehsan Hoque. **Hitting your MARQ: Multimodal ARGument Quality Assessment in Long Debate Video** *Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2021

**PEER
REVIEWED
WORKSHOP
PAPERS**

James Spann, Pratik Bongale, Chris Homan. **(Un)certainity selection methods for Active Learning on Label Distributions** *15th International OPT Workshop on Optimization for Machine Learning, NeurIPS*, 2023

**PEER
REVIEWED
DOCTORAL
CONSORTIUM**

Context-Driven Multimodal Tools for Engaging DHH Children at Home *26th International ACM SIGACCESS Conference on Computers and Accessibility*, 2025

**HONORS AND
AWARDS**

National Science Foundation - Research Traineeship on Augmented and Virtual Reality 2023 - 2024

University of Rochester PhD Policy Pitch competition - 2nd place Spring 2024

Heidelberg Laureate Forum - Young Researcher 2022

ACM Symposium on Spatial User Autumn 2021

Interaction (ACM SUI) - Best Paper Award	
Richard Tapia Celebration of Diversity in Computing Conference Scholarship - <i>Jane Street Scholar</i>	Autumn 2021
The National GEM Consortium - GEM Associate Fellow	2020 - 2022
National Science Foundation - Research Traineeship Fellowship	2020 - 2021
University of Rochester - Provost's Fellowship (Deferred until Autumn 2021 for the NSF Trainee Fellowship)	2020 - 2022
RIT McNair Scholar	(4 semesters) 2018-2020
RIT Tiger Tank Business Competition Finalist	2019
California Institute of Technology SURF Fellow	2018
First place award - University of Rochester Spring DandyHacks Hackathon	2018

TEACHING EXPERIENCE

Intro to Programming (CSC 161) - Teaching Assistant	Autumn 2021, Spring 2022
Maintained office hours for student assistance, managed and participated in exam grading sessions with other TAs, and helped write course content for exams and projects.	
Upward Bound Math/Science Program - Teacher	Summer 2021, Summer 2022
Designed and taught intro Computer Science lectures as a part of the University of Rochester's Summer 2021 Upward Bound program for Rochester high school students. Created and supervised weekly hands-on example activities, and demonstrated various programming techniques.	
Data Management Systems (CSC 263/463) - Student Grader	Spring 2021
Graded student exams and assignments.	
Principles of Data Mining (CSCI 420) - Student Grader	Spring 2020
Graded student quizzes and held weekly office hours.	

INVITED TALKS

Designing a tool for longitudinal at home studies CAIR Lab - Rochester Institute of Technology	2026
Opening Ceremony 11th Heidelberg Laureate Forum	2024
Graduate Student Panel GEM Grad Lab - University of Rochester	2023
Assisting Doctors with Movement Disorder Diagnosis using AI Graduate Research Day - University of Rochester	2022
Assisting Doctors with Movement Disorder Diagnosis using AI	

	NSF-NIH Smart and Connected Health workshop - Washington State University	2022
	Research workflows with Jupyter and Conda	
	PhD #Shots - Rochester Institute of Technology, Rochester, New York	2022
	OPAL and Robots Or How I Stopped Worrying And Learned to Algorithmically Trust	
	MIT Media Lab, Cambridge, Massachusetts	2019
	Detecting bias through user interaction	
	MIT Media Lab, Cambridge, Massachusetts	2017
	Knock on Wood Sensor	
	RIT Undergraduate Research Symposium, Rochester, New York	2016
SELECTED POPULAR PRESS	Using AI to advance child development and learning	2024
	Discover Something New at Imagine RIT	2019
	The secret lives of students who mine cryptocurrency in their dorm rooms	2018
	A season of learning at the Lab	2017
ACADEMIC ACTIVITIES	Journal Reviewer: Journal on Multimodal User Interfaces (2022), ACM IMWUT (2023)	
	Conference Reviewer: ACII'21,23; ASSETS'26 (Technical Papers); CHI'23; CHI LBW'23,24,25; DIS'26; DIS WiP'26; IUI'25; Mensch und Computer'25;	
	Program Committee: IUI'25; ASSETS'26 (Experience Reports)	
	Future PC Workshop: ASSETS'26	
	Workshop Reviewer: NeurIPS OPT'24	
	University of Rochester School of Arts, Sciences & Engineering - Conference Grant Reviewer:	Winter 2021, Spring 2022
	MIT Summer Research Program Application Review Committee:	2021, 2022, 2023, 2024
	URCS PhD Admissions Committee:	2024
ACTIVITIES	University of Rochester AI Horizons Working Group	August 2024 - February 2025
	Graduate Students of Color	August 2020 - August 2022
	Computer Petting Zoo Exhibitor	May 2019 - June 2020
	Stanford SERGE	October 2019
	McNair Scholars Program	2018-2020
	MIT Media Lab Digital Currency Initiative Bootcamp	Summer 2016
	RIT Data Science Research Group	2016-2020
	Louis Stokes Alliances for Minority Participation (LSAMP)	2018-2020

Multicultural Center for Academic Success Program	2015-2020
RIT No Voice Zone	2015-2020
RIT Go Club	2018-2020
RIT Fencing Club	2015-2017

STUDENTS	Vuong Chi Ho, B.S./M.S. Computer Science, U of R	Spring 2024-Summer 2025
SUPERVISED	Sarah Chen, B.A. Psychology, U of R	Spring 2022-Fall 2022

REFERENCES

Dr. Zhen Bai

Assistant Professor of Computer Science, Department of Computer Science
University of Rochester

Dr. Ehsan Hoque

Associate Professor of Computer Science, Department of Computer Science
University of Rochester

Dr. Chris Harrison

Associate Professor of Human Computer Interaction, Department of Computer Science
Carnegie Mellon University

Dr. Christopher M. Homan

Associate Professor, Department of Computer Science
Rochester Institute of Technology

Dr. Daniel Ashbrook

Associate Professor, Department of Computer Science
University of Copenhagen

Dr. Alex Pentland

Professor of Media Arts and Sciences
Massachusetts Institute of Technology - Media Laboratory

Dr. Andrew Lippman

Professor of Media Arts and Sciences
Massachusetts Institute of Technology - Media Laboratory

Dr. Adrian Stoica

Senior Research Scientist
National Aeronautics and Space Administration - Jet Propulsion Laboratory