

RIYA SAHNI

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New York, NY

RESEARCH FOCUS

I design and study human-AI systems that make AI behavior more transparent, steerable, and aligned with human intent in creative and enterprise settings. My work spans qualitative studies of AI adoption, provenance, and the design of agentic systems.

EDUCATION

Columbia University

Ph.D. Candidate in Computer Science

New York, NY

M.S. Computer Science

Advisor: Dr. Lydia B. Chilton

The University of Chicago

B.S. in Computer Science with a Specialization in Human-Computer Interaction

Chicago, IL

B.A. in Economics

Advisors: Dr. Marshini Chetty, Dr. Sarah Sebo

GRANTS

National Science Foundation Graduate Research Fellowship

2024

Jeff Metcalf Award

2021

PUBLICATIONS

* denotes equal contribution

- **Under review** – *Who Shaped What? Untangling Human and AI Creative Contributions Through Spatial Provenance in Image Editing*. **Riya Sahni**, Christine Dierk, Lydia B. Chilton, Eunyee Koh, Doga Dogan*, Tongyu Zhou*.
- **Under review** – *Rasoi: Visual Diffs for Evaluating Structural Changes Made by Coding Agents*. **Riya Sahni**, Aryan Kaul, Anushka Bhatnagar, Xuanming Zhang, Vivian Liu, Reya Vir, Lydia B. Chilton.
https://riyasahni.github.io/papers/rasoi_paper.pdf.
- **HCOMP 2026** – *AgentDynEx: Nudging the Mechanics and Dynamics of Multi-Agent Simulations*. Jenny Ma*, **Riya Sahni***, Karthik Sreedhar, Lydia B. Chilton. <https://dl.acm.org/doi/pdf/10.1145/3834580.3838752>.
- **HICSS 2026** – *Beyond Training: How Workers Discover Value in Enterprise AI*. **Riya Sahni**, Lydia B. Chilton. <https://api.semanticscholar.org/CorpusID:281843982>.
- **CSCW 2025** – *An Experimental Study of Netflix Use and the Effects of Autoplay on Watching Behaviors*. Brennan Schaffner, Yaretsi Ulloa, **Riya Sahni**, Jiatong Li, Ava Kim Cohen, Natasha Messier, Lan Gao, Marshini Chetty. <https://dl.acm.org/doi/abs/10.1145/3710928>.
- **CHI 2025** – *DynEx: Dynamic Code Synthesis with Structured Design Exploration for Accelerated Exploratory Programming*. Jenny Ma, Karthik Sreedhar, Vivian Liu, Sitong Wang, Pedro Alejandro Perez, **Riya Sahni**, Lydia B. Chilton. (*Best paper honorable mention*). <https://dl.acm.org/doi/full/10.1145/3706598.3714115>.

RESEARCH EXPERIENCE

Adobe Research

Research Scientist/Engineer Intern

San Jose, CA

May 2026 – August 2026

Mentors: Tongyu Zhou, Doga Dogan, Christine Dierk, Eunyee Koh

- Conducted mixed-methods HCI research on human-AI creative contribution and provenance; designed and prototyped interaction concepts for generative image editing.
- Contributed to 2 patent submissions and 1 Adobe Max Sneaks submission (annual global conference) relevant to Adobe Firefly Studio, Adobe Express, and Content Credentials.

Microsoft AETHER

Research Volunteer

New York, NY

August 2023 – September 2024

Mentor: Dr. Mihaela Vorvoreanu

- Developed a codebook and qualitatively analyzed data from over 50 participants in a mixed-methods study of user dependency on Copilot. Results published internally at Microsoft and presented at Ignite 2024

The University of Chicago, AIR Lab

Chicago, IL

Research Assistant

February 2023 – January 2024

Advisor: Dr. Marshini Chetty

- Developed Qualtrics survey instruments for a multi-part Netflix study; recruited participants and conducted preliminary studies to refine the survey design.
- Presented an EdTech poster on online child data privacy and security at the National Robotics Week Block Party at Chicago's Museum of Science and Industry.

The University of Chicago, HRI Lab

Chicago, IL

Research Assistant

March 2023 – June 2024

Advisor: Dr. Sarah Sebo

- Recruited teachers from budget-limited U.S. elementary public schools, developed and conducted virtual interviews, transcribed recordings, and initiated qualitative coding

INDUSTRY EXPERIENCE

Microsoft

New York, NY

Customer Success Account Manager, Banking & Financial Services

August 2023 – September 2024

- Managed enterprise contracts for two major U.S. credit unions, coordinating renewals, service planning, escalations, and delivery with engineering and sales. Executed a six-month roadmap that secured a full-term renewal.
- Collected product feedback, including on M365 Copilot. Elected to the Aspire Executive Leadership Team; organized the Aspire Reverse Mentorship Program.

Microsoft

Chicago, IL

- *Data and AI Cloud Solutions Architect Intern*

June 2022 – September 2022

- Developed and delivered Git/GitHub, Azure Synapse, and Azure DevOps demos and training for internal teams and enterprise clients, including Allstate and Cerner. Earned AZ-900 certification and a recommendation for a full-time offer.

- *Data and AI Customer Engineer Intern*

June 2021 – September 2021

- Delivered Power BI, DAX, and Power Query demos to GoPro and Humana clients. Earned Microsoft data analyst certification; placed in the top 20% of 130 interns in the Intern Logic Puzzle Tournament.

Tiburon Resources

Houston, TX

Software Developer Intern

January 2021 – June 2021

- Developed and debugged Python API calls for energy data collection; analyzed and presented global energy-demand scenarios and drivers of the energy transition.

Chevron Information Technology Company

Houston, TX

Data Engineering Intern, Data Analytics & Modern Data Teams

June 2020 – September 2020

- Built a cloud data warehouse using Azure SQL Server and SQL Server Management Studio; developed Power BI reports. Placed 4th of 11 teams in an intern data-science challenge using Python regression models.

TEACHING

Columbia University

New York, NY

Teaching Assistant, COMS 4995

January 2026 – May 2026

Course: *Startup Studio: AI Accelerated Building and Validation*

Columbia University

New York, NY

Teaching Assistant, COMS 4170 UI Design

January 2026 – May 2026

- Mentored 30 students, hosted weekly office hour sessions, and graded assignments.

Columbia University

New York, NY

Teaching Assistant, COMS 4170 UI Design

January 2025 – June 2025

- Mentored 25 students, hosted weekly office hour sessions, and graded assignments.

The University of Chicago

Chicago, IL

Teaching Assistant, MPCS 53001 Databases

September 2022 – December 2022

- Supported 60 master's students through weekly office hours and grading of homework and exams.

SERVICE

ReadAhead Mentorship Program

New York, NY

Reading Mentor

October 2024 – Now

- Conduct bi-weekly reading sessions with an elementary school student, focusing on reading comprehension and vocabulary.

Columbia University, GrOCS

New York, NY

Founding Member; Head of Social Media and Communications

December 2024 – Now

- Manage the Graduate Organization for Computer Science's primary social channel and event promotion.

Microsoft Tristate Disability ERG, NY Chapter

New York, NY

Lead Event Programmer

October 2023 – September 2024

- Founded and hosted a bi-weekly lunch-and-learn series on accessibility and inclusive technology. Co-planned a 250+ person panel with the Eagles Autism Foundation and a 200+ person virtual toy drive with Holton's Heroes.

SKILLS

Programming: Python, Rust, JavaScript/Node.js, C, CSS/HTML

AI & Systems: OpenAI API, M365 Copilot, Azure AI (fundamentals)

Data & Tools: Power BI, MySQL, MongoDB, pandas, Flask, Git/GitHub, Figma, Adobe Express

Languages: English (native), conversational Spanish and Hindi