

Rachel Kim

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Last Updated: December 5, 2024

Education

Carnegie Mellon University

Pittsburgh, PA, USA

PhD: Societal Computing, School of Computer Science

Aug 2024 - Present

— Advised by Professor Hoda Heidari and Professor Rayid Ghani

— Courses: Responsible Artificial Intelligence, Applied Research Methods

University of Toronto

Toronto, ON, Canada

HBSc: Computer Science Specialist, Mathematics Major

Sep 2020 - Jun 2024

— Graduated with High Distinction

Research Experience

Carnegie Mellon University

Pittsburgh, PA, USA

Research Assistant, advised by Professor Hoda Heidari and Professor Rayid Ghani

Aug 2024 - Present

— Conducting research on artificial intelligence (AI) audits and assurances

— Designing and conducting interviews and performing a comprehensive literature review

Computational Social Science Lab, University of Toronto

Toronto, ON, Canada

Research Assistant, advised by Professor Ashton Anderson

Jun 2021 - Oct 2024

— Conducted research on understanding political and public policy-related discussions on online platforms

— Extracted stances, topics, and frames from millions of Reddit comments and news articles

— Processing and analyzing Reddit comments and news articles in Python using jupyter, pandas, pyspark, nltk, gensim, Hugging Face transformers, and langchain; visualizing data using matplotlib, seaborn

University of Toronto

Toronto, ON, Canada

Research Assistant, advised by Professor Peter Marbach

May 2023 - Aug 2023

— Conducted research on understanding influence on social media, applying and testing a pre-existing theoretical model of communities, their structural properties, and influence on real-world Twitter data

— Leveraged clustering algorithms, principal component analysis, and statistical tests

— Processed and analyzed a MongoDB database of > 100,000 tweets in Python; visualized data using matplotlib, seaborn

BMO Lab, University of Toronto

Toronto, ON, Canada

Machine Learning Research Assistant

Oct 2020 - Mar 2021

— Contributed to research efforts in the intersection between art, performance, emerging technologies, and artificial intelligence (AI)

— Read and summarized research papers on BigGAN, CLIP, and DALL-E

— Preprocessed and cleaned play scripts using regex; performed experiments using pytorch

Publications

The Agenda-Setting Function of Social Media

Rachel Kim, Ashton Anderson

Under Review

Capturing Dynamics in Online Public Discourse: A Case Study of Universal Basic Income Discussions on Reddit

Rachel Kim, Veniamin Veselovsky, Ashton Anderson

Posters and Presentations

Capturing Dynamics in Online Public Discourse: A Case Study of Universal Basic Income Discussions on Reddit

Rachel Kim, Veniamin Veselovsky, Ashton Anderson

Poster at the *International Conference on Computational Social Science (IC2S2)*, Jul 2024

Quantifying Public Discourse on Policy Issues: A Case Study of Universal Basic Income Discussions on Reddit

Rachel Kim, Veniamin Veselovsky, Ashton Anderson

Oral Presentation at the *International Conference on Computational Social Science (IC2S2)*, Jul 2022

Assessing the Impacts of COVID-19 on Reddit

Veniamin Veselovsky, Rachel Kim, Ashton Anderson

Oral Presentation at the *International Conference on Computational Social Science (IC2S2)*, Jul 2022

Awards and Honours

<i>Daniel Berlin Scholarship</i> , University of Toronto	2024
<i>Dean's List Scholar</i> , University of Toronto	2020 - 2024
<i>The Marion Edith Binning Scholarship</i> , University of Toronto	2023
<i>NSERC Undergraduate Student Research Award</i> , NSERC	2023
<i>The Robert C. Dowsett Scholarship</i> , University of Toronto	2022
<i>The Professor R. K. Arnold Scholarship</i> , University of Toronto	2021
<i>Laidlaw Undergraduate Research and Leadership Scholarship</i> , Laidlaw Foundation	2021
<i>C. David Naylor Scholarship</i> , University of Toronto	2020
<i>President's Scholar of Excellence</i> , University of Toronto	2020

Teaching Experience

University of Toronto

Teaching Assistant, CSC258: Computer Organization

Toronto, ON, Canada

Winter 2023, Winter 2024

Service

Reviewer, ACM Web Conference (WWW) 2025

Industry Experience

TELUS

Toronto, ON, Canada

Software Development Intern, Architecture Practice Enablement (ArchPE) Team Sep 2022 - Dec 2022

- Automated KPI calculations and dashboards through Google Data Studio and JavaScript, saving > 1 month of time across the ArchPE Team
- Added capabilities to Backstage software templates used internally by > 50 teams using JavaScript, Docker, Google Cloud Platform (GCP), and Git
- Designed and developed APIs using Postman and PHP

Community Involvement

Computer Science Undergrad Affairs Committee, University of Toronto Toronto, ON, Canada

Student Representative

Sep 2022 - Apr 2024

- Representing the undergraduate voice in weekly meetings discussing academic policy and services that impact > 1,200 students with professors and departmental staff

makesense Mexico*Project Management Leader*

Mexico City, Mexico

Jul 2022 - Aug 2022

- Worked with Nidaria, an organization in Mexico City that collects organic waste from customers' homes and converts it into farm animal feed for local farmers
- Recruited and co-led a group of seven volunteers to interview customers, created a video on Nidaria's impact, and hosted a Sustainability Festival with an attendance of > 40
- Succeeded in getting an additional 43% of the existing customer base to indicate high interest in subscribing to Nidaria

Computer Science Student Union, University of Toronto*Director of Academic Events*

Toronto, ON, Canada

Sep 2020 - May 2022

- Led events like tea time with professors, research seminars, and study sessions for > 1,200 computer science students

World University Service of Canada, University of Toronto*Social Media Coordinator*

Toronto, ON, Canada

Sep 2020 - Apr 2022

- Supported the acclimation to Canada for two refugee students as they started their studies at the University of Toronto
- Raised awareness of refugee and education issues

Compassion Korea*Korean-English Translator Volunteer*

Remote

Sep 2017 - Apr 2021

- Translated letters between sponsors and sponsored children weekly from Korean to English and vice versa