Rachel Kim

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Education

Carnegie Mellon University

Pittsburgh, PA, USA

Aug 2024 - Present

 ${\it PhD: Societal\ Computing},$ School of Computer Science

— 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

— Graduated with High Distinction

Sep 2020 - Jun 2024

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

Jun2021 - 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

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

Teaching Experience

University of Toronto Toronto, ON, Canada Teaching Assistant, CSC258: Computer Organization Winter 2023, Winter 2024

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 and Service

Reviewer, ACM Web Conference (WWW) 2025	2024
Student Rep., Computer Science Undergrad Affairs Committee, University of Toronto	2022 - 2024
Project Management Leader, makesense Mexico	2022
Director of Academic Events, Computer Science Student Union, University of Toronto	2021-2022
Social Media Coordinator, World University Service of Canada, University of Toronto	2020-2022
First-Year Representative, Computer Science Student Union, University of Toronto	2020-2021
Korean-English Translator Volunteer, Compassion Korea	2017-2021