Rachel Kim

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Education

Carnegie Mellon University ⟶ Pittsburgh, PA, USA
PhD: Societal Computing, School of Computer Science ⟶ Aug 2024 - Present

University of Toronto ⟶ Toronto, ON, Canada
HBSc: Computer Science Specialist, Mathematics Major ⟶ Sep 2020 - Jun 2024
— Graduated with High Distinction

Research Experience

Computational Social Science Lab, University of Toronto ⟶ Toronto, ON, Canada
Research Assistant, advised by Professor Ashton Anderson ⟶ Jun 2021 - Present
— Research projects on understanding political and public policy-related discussions on online platforms
— Extracting stances from and leveraging topic modelling on Reddit comments
— Applying Reddit community embeddings to quantify the impact of a community's age, gender, partisan leaning, and affluence levels on opinions and discussions surrounding public policies
— Processing and analyzing millions of Reddit comments 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
— Research project on understanding influence on social media
— Applied and tested a pre-existing theoretical model of communities, their structural properties, and influence on real-world Twitter data to understand influence on social media
— 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

Capturing Dynamics in Online Public Discourse: A Case Study of Universal Basic Income Discussions on Reddit
Rachel Kim, Veniamin Veselovsky, Ashton Anderson
International Conference on Web and Social Media (ICWSM), 2025

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

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 Mexico City, Mexico
Project Management Leader Jul 2022 - Aug 2022
— Worked with Nidaria, an organization in Mexico City that collects organic waste from customers' homes and coverts 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 Toronto, ON, Canada
Director of Academic Events 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 ⠀⠀⠀⠀⠀⠀ Toronto, ON, Canada
Social Media Coordinator ⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀ 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 ⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀ Remote
Korean-English Translator Volunteer ⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀ Sep 2017 - Apr 2021
— Translated letters between sponsors and sponsored children weekly from Korean to English and vice versa