

Khaoula Chehbouni

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EDUCATION

- **McGill University/Mila** Montreal, QC
PhD in Computer Science
Aug 2023 - Aug 2027
Under the supervision of professor Golnoosh Farnadi
- **HEC Montreal/Mila** Montreal, QC
Master of Science in Business Intelligence; GPA: 4.07/4.3
Aug 2020 - Aug 2022
Under the supervision of professors Golnoosh Farnadi and Gilles Caporossi
- **HEC Montreal** Montreal, QC
DESS in Information Technologies; GPA: 3.99/4.3
Aug 2019 - Aug 2020
- **University of Montreal** Montreal, QC
Certificate in Applied Computer Science
Jan 2017 - Dec 2017
- **HEC Montreal** Montreal, QC
Bachelor of Administration
Aug 2011 - Dec 2015

SKILLS SUMMARY

- **Programming Languages** Python, R, SQL, SAS
- **Languages** French, English, Arabic, Spanish

EXPERIENCE

- **Statistics Canada** Montreal, QC
Senior Data Scientist
Present
 - **Project:** Work in the *Research, Method and Information Extraction* section in fairness and privacy issues in large language models.
- **Mila - Quebec AI Institute** Montreal, QC
Research Intern
Jan 2023 - June 2023
 - **Project:** Worked on bias mitigation and privacy in sparse language models under professor Golnoosh Farnadi.
- **Statistics Canada** Montreal, QC
Data Scientist
Sep 2022 - Jan 2023
 - **Position:** Work in the *Methods, Quality and Research* section in responsible AI
 - **Project:** Developed a course on bias and fairness in machine learning
- **IBM x Ivado** Montreal, QC
Research Assistant
Oct 2021 - Apr 2022
 - **Project:** Towards Discovering and Understanding how to improve the representation of women in STEM: A case study from IBM Inventorship and Patenting
 - **Description:** Literature review and predictive modeling to understand inclusion issues in IBM's patents activities
- **La Presse x Ivado** Montreal, QC
Data Journalist Intern
May 2021 - Sep 2021
 - **Text Analysis:** Scrapping, topic modeling, sentiment analysis, clustering, predictive modeling
 - **Writing:** Published 9 articles on La Presse's official website, 3 of them were front-page articles
- **Canadians for Justice and Peace in the Middle East** Montreal, QC
IT Manager
Jan 2016 - Dec 2021
 - Managed IT bugs, transfer of data, and design improvement projects.
 - Implemented the new website on the NationBuilder platform
 - Created practical tools and tutorials for management and accounting software

RESEARCH PROJECTS

- **Early Detection of Sexual Predators with Federated Learning.** Chehbouni, K., Caporossi, G., Rabbany, R., De Cock, M., Farnadi, G., In: Workshop on Federated Learning: Recent Advances and New Challenges (in Conjunction with NeurIPS 2022).
- **AI and Cities: Risks, Applications and Governance.** Koseki, S. et al. et al., In: 4th Urban Economy Forum Conference 2022
- **Leveraging AI for Natural Disaster Management: Takeaways From The Moroccan Earthquake.** Ezzine, L. et al., In: 6th Workshop on Artificial Intelligence for Humanitarian Assistance and Disaster Response NeurIPS 2023.
- **Unmasking Predators: Safeguarding Vulnerable Moroccan Communities Post-Earthquake** Taïk*, A., Chehbouni*, K., Jain*, K., et al., In: North Africans in Machine Learning Workshop at NeurIPS 2023.
- **From Representational Harms to Quality-of-Service Harms: A Case Study on Llama 2 Safeguards** Chehbouni, K., et al., Forthcoming
- **Enhancing Privacy in Early Detection of Online Grooming Through Federated Learning and Differential Privacy** Chehbouni, K. et al., Forthcoming
- **The Impact of Sparsity on Fairness and Privacy in BERT.** Chehbouni, K. et al., Forthcoming
- **Systematic Hazard Taxonomy Along the AI Lifecycle.** Chehbouni, K., et al., Forthcoming

AWARDS AND SCHOLARSHIP

- FRQNT doctoral training scholarships
My research proposal "Equity and Intersectionality: A New Perspective for Generative Models" was awarded one of the prestigious FRQNT doctoral training scholarships. It's an annual scholarship of \$25000 per year for 4 years (for a total of \$100000).
- Mila Excellence Scholarship - EDI in Research
I was awarded one of Mila's Excellence scholarship for the category EDI in Research, PhD level. It's an annual scholarship of \$8000 per year for 3 years (for a total of \$24000).
- Winner of the Morocco Solidarity Hackathon 2023
Our project "Unmasking Predators: Safeguarding Vulnerable Moroccan Communities Post-Earthquake" won the Morocco Solidarity Hackathon. We were awarded virtual passes to attend NeurIPS as well as \$5,000 AWS credit.
- HEC Montreal's 2022 Best Thesis Award
My thesis "Mitigating Online Grooming with Federated Learning" won the 2022 Best Thesis Award at HEC Montreal. The award consisted of a scholarship of \$2000.
- Women in Machine Learning Travel Grant
I was awarded 650\$US to present my Masters work at the Women in Machine Learning Workshop at NeurIPS 2022.
- IVADO Excellency scholarship "Data Storytelling"
I was awarded one of IVADO's internship scholarship to conduct an internship at La Presse in data storytelling. The award consisted of a scholarship of \$5000.

COMMUNITY SERVICE

- **Technovation Montreal** Montreal, QC
Mentor Present
 - I mentor a group of high-school girls in the development of an application to help teenagers with their career choices as part of the International Technovation Challenge.
- **Mila - Quebec AI Institute** Montreal, QC
PhD Student Present
 - I organize the Fairness, Accountability, Transparency, and Ethics reading group at Mila.
 - I reviewed papers for the SoLaR Workshop and the AFT Workshop at NeurIPS 2023, as well as the Responsible Generative AI workshop at CVPR 2024.
 - I was a student volunteer at NeurIPS 2023 in New Orleans.
- **Canada's New Democrats (NDP) Association** Montreal, QC
Financial Agent 2019 - 2020
 - Managed the financial operations of candidate Miranda's Gallo campaign in the district of Saint-Laurent.
 - Reported financial results to Elections Canada.