Rebecca Salganik

Email : rebecca.salganik@mila.quebec
Personal Website: https://www.rebeccasalganik.com
Linkedin: https://www.linkedin.com/in/rebecca-salganik-7820a612b/
Github: https://github.com/Rsalganik1123

Education

- **Universite de Montreal/Mila** — Montreal, QC, Canada
  Masters in Computer Science; GPA: 4.13/4.30 — *Aug 2021 - May 2023*
  Courses: Spectral Graph Theory, Network Science, Tensor Factorization.
- **McGill University** — Montreal, QC, Canada
  B.A in Computer Science; GPA: 3.54/4.00 — *Aug 2017 - May 2021*
- **McGill University** — Montreal, QC, Canada
  B.Mus in Voice Performance, Minor Marketing; GPA: 3.87/4.00 — *Aug 2015 - May 2017*

Skills Summary

- **Programming Languages**: Python, Java, C, SQL, Unix scripting
- **Languages**: Russian, English, French

Work Experience

- **Pandora Labs - SiriusXM** — Remote
  Research Intern - Fabien Guyon — *June 2023 - Aug 2023*
  - **Position Details**: Worked in the *Recommendation System* team, supervised by Fabien Guyon, Andres Ferraro, and Sergio Oramas
  - **Project Details**: Integrating collaboration data into graph-based artist representation learning for downstream recommendation tasks
- **MIT Lincoln Labs** — Lincoln, MA
  Research Intern - Dr. Michael Brandstein — *Aug 2020 - Dec 2021*
  - **Position Details**: Worked in the *Signal and Lanugage Processing* team (Group 52), supervised by Dr. Michael Brandstein
  - **Project Details**: Using a CNN to classify the location (longitude and latitude) of field recordings based on the bird calls present in them
  - **Novel feature extraction library**: Implemented a information retrieval feature extraction library (MPEG-7) for signal the use of processing feature extraction
  - **CNN models**: Inception Stem CNN, CNNk2c2, and RCNN architectures for classification of a spectrogram image
- **Lyft** — Remote
  Machine Learning Engineer Intern — *May 2020 - August 2021*
  - **Dispatch Modelling**: Implemented the Gaussian UCB algorithm for integration with the internal predictive models used for dispatching drivers
  - **RL based Hyperparameter tuning**: Assisted in prototyping of an RL algorithm to select hyperparameters for backbone machine learning models
- **McGill University - Prof. William Hamilton** — Montreal, QC, Canada
  Undergraduate Research Student — *September 2019 - December 2019*
  - **Predicting Music Popularity**:
    - Designed, organized, and scoped the project proposal
    - Worked with the Spotify and Billboard API's to scrape temporal song charts
    - Implemented a series of machine learning and deep learning models to classify the likelihood of a song appearing in the Billboard Top 100 charts
    - Produced complete and thorough report of work + github repository of code
- **ActivSignal** — Boston, MA, US
  Research Engingeering Intern — *May 2019- August 2019*
  - **Data Analysis**:
    - Worked with Pancreatic Cancer Dataset to identify unique protein signatures for early diagnosis
  - **Machine Learning**:
    - Developed regression models for predictive analysis of sample quality
- **CitiBank** — Toronto, ON, Canada
  Software Engingeering Intern — *May 2019- August 2019*
  - **Python Developer**:

- Implemented python script for monitoring trading logs for latency anomalies

- **Gramophone Media** NYC, NY, USA
  Marketing Intern *May 2017- August 2017*
  - **Public Relations**:
    - Coordinated social media outreach before album launches
  - **Press Relations**:
    - Communicated with media outlets located on tour routes to increase media turnout
  - **Market Analysis**:
    - Presented analytics of clients' social media presence

Academic Projects

- **Harms from Increasingly Agnetic Systems**: In: FaccT 2023. Chan, A., **Salganik, R.**, Markelius, A., Pang, C., Rajkumar, N., Krasheninnikov, D., Langosco, L., He, Z., Duan, Y., Carroll, M., Lin, M., Mayhew, A., Collins, K., Molamohammadi, M., Burden, J., Zhao, W., Rismani, S., Voudouris, K., Bhatt, U., Weller, A., Krueger, D., Maharaj, T. https://arxiv.org/abs/2302.10329
- **Exposure Fairness in Music Recommendation** : In: NeurIPS 2022 WiML Workshop. Salganik, R., Diaz, F., Farnadi, G., (Forthcoming)
- **Analyzing the Effect of Sampling in GNNs on Individual Fairness**: In: RecSys 2022 FaccTRec Workshop. Salganik, R., Diaz, F., Farnadi, G.. https://arxiv.org/pdf/2209.03904.pdf
- **AI & Cities: Risks, Applications and Governance**: Mila – Québec Artificial Intelligence Institute. UN-Habitat: Nairobi. https://unhabitat.org/ai-cities-risks-applications-and-governance
- **The AI Industry Through the Lens of Ethics and Fairness**: In: Missing Links in AI Governance. Mila, UNESCO: Paris. Farnadi, G., Leal, A. and **Salganik, R.**, https://unesdoc.unesco.org

Honors and Awards

- Ivado Scholar - Masters of Excellence

  Applicants were required to submit project proposal, 3 letters of recommendation, and transcripts. Awards were granted based on the grades and merit of project contributions towards greater good. Selected scholars were granted a 20K financial stipend.

Community Outreach

- DEFirst Reading Group - 2022-2023

  Organizing weekly reading group (link) focused on fairness in recommendation, ranking, and information retrieval

- Helpdesk Tutor - 2020-2021

  Volunteered 4 hours a week to provide free tutoring for computer science undergraduate students

- VP Arts CSUS - 2019-2020

  Elected as Faculty of Arts representative for the Computer Science Undergraduate Society.