Brenda Namuhoranye

Email: brenda.namuhoranye@gmail.com • Cell Phone: 514-244-4082

GitHub: https://github.com/BrendaNamuh • https://brendanamuh.github.io/personal-website/

Education

Bachelor of Arts and Science, McGill University, Montreal, QC, Canada. **Sept. 2019- Dec. 2022**

- Major: Honours Cognitive Science, concentration in Computer Science
- Minor: Computer Science

Diplôme d'études collégiales, Dawson College, Montréal, QC, Canada **Sept. 2017 - May 2019**

- Program**:** Health Sciences

Work Experience

The Canadian Press **Mar. 2023 - Sept. 2024**

Software Engineer

- Developed robust software components to enhance news delivery and content management applications using Python, AWS, MongoDB, Angular, and REST APIs.
- Leveraged NLP technology to extract gender representation insights from news stories and created interactive dashboards with AG Grid to visualize the results.
- Conducted in-depth data analysis for journalists, i.e examining court transcripts, and utilizing Plotly to effectively present findings.

AI4Good Lab **May 2023 - June 2023**

Machine Learning Fellow

- Co-developed "Hide-It," a machine learning Chrome extension that detects triggering content on Reddit, enhancing user safety and experience.
- Presented the product to a diverse group of stakeholders during Demo Day, effectively communicating its value and impact.
- Actively participated in industry conferences and workshops led by experts, gaining insights into cutting-edge machine learning techniques throughout the intensive 6-week program.

Bagot Behavioural Neurogenomics Lab **Sept. 2021 - May 2022**

Undergraduate Researcher

- Analyzed fiber-photometry and behavioural data to investigate the integration of outcomes over time in reward learning.
- Extensive use of Pandas, NumPy, Seaborn python libraries
- Summarized findings in honours thesis paper

Extracurriculars

CSUS Helpdesk, McGill University **Jan. 2023 - Apr. 2023**

Tutor

- Answer drop-in questions regarding assignments and course material
- Review and help debug students' code

Cognitive Circuits, Undergraduate Research Journal at McGill **Sept. 2022 - Apr. 2023**
Editor

- Edit undergraduate research papers concerning, computer science, neuroscience, psychology, linguistics, and philosophy
- Interview graduate students about their research in these fields

McGill Biomechanics Club, Wearable Tremor Suppression Glove **Apr. 2022 - Apr. 2023**
Captain of Electrical Team

- Oversee operations of electrical team
- Define project timeline, targets, and deliverables with Project Lead
- Lead Inertial Measurement Units (IMU) Selection
- Lead the implementation of adaptive algorithms (WFLC, BMFLC) for tremor modelling (Python)

Girls Who Code, McGill Chapter **Jan. 2022 - Apr. 2022**
Facilitator

- Curated an introductory coding curriculum for girls between the ages of 9 - 12
- Prepared presentations showcasing women in STEM

Personal Projects

Hide-It App (Python, HTML,CSS)

- Trained a Support Vector Classifier (SVC) model using scikit-learn to detect distressing reddit content based on user's preferences. Achieved 86% accuracy.
- Implemented a Flask API to serve the model, providing scalable and secure access.
- Developed the front end of the chrome extension using HTML, CSS, Javascript.

Visual ML Demo (JavaScript [d3.js], Python, HTML, CSS)

- Developed a web application to visualize fundamental machine learning models, including Linear Regression and Support Vector Machine (SVM).
- Wrote Python script that generates weights and costs per epoch for each model

---

Publications

Papers

- Iyer, E., Muir, J., **Namuhoranye, B.**, & Bagot, R. (2022). P239. Glutamatergic afferents to the nucleus accumbens integrate outcomes in reward-learning. Biological Psychiatry, 91(9), S184.

Posters

- Iyer*, E.S., Muir*, J., **Namuhoranye, B.***, Bagot, R.C. (2022). Glutamatergic inputs to the nucleus accumbens integrate outcomes in reward learning. Canadian Association for Neuroscience Meeting, Toronto, Canada, May.
- Iyer*, E.S., Muir*, J., **Namuhoranye, B.***, Bagot, R.C. (2022). Glutamatergic inputs to the nucleus accumbens integrate outcomes in reward learning. Canadian Association for Neuroscience Meeting, Toronto, Canada, May.
- Iyer*, E.S., Muir*, J., **Namuhoranye, B.***, Bagot, R.C. (2022). Glutamatergic inputs to the nucleus accumbens integrate outcomes in reward learning. Society of Biological Psychiatry, New Orleans, USA, April.

Skills/Interests

- Programming languages (in order of proficiency): Python, SQL, JavaScript, CSS/HTML, Java
- Frameworks (in order of proficiency): Angular, React
- Bilingual (English and French)
- Interests: Software Engineering, Computational Neuroscience, Machine Learning