Brenda Namuhoranye

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

Education

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

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

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

- Program**:** Pure & Applied Science

École Secondaire Mont-de-LaSalle, Laval, QC, Canada **Sept. 2013 - June 2017**

Work Experience

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

Undergraduate Researcher

- Investigated the role of prefrontal cortex projections and ventral hippocampal projections to the nucleus accumbens in integrating outcomes over time in reward learning.
- Analyzed fiber-photometry and behavioural data: Applying deconvolution techniques, visualizations, summary statistics, using Python
- Summarized findings in research paper

Prometheus Lab (Dr. Joseph Vybihal), McGill University **May 2020 - August 2020**

Intern under Integrated General Purpose AI Seminar

- Introduced to neural networks, knowledge nodes, meta systems etc.
- Informed the implementation of algorithms with notions from cognitive neuroscience

Infant Brain Imaging Study (IBIS), Montreal Neurological Institute **June 2018- August 2018**

Intern under Dawson Neuroscience Research Group

- Shadow researchers, project managers and software developers
- Cleaning and sorting of datasets using Python
- Performed weekly progress presentations with team
- Participated in neuroscience poster symposium

Extracurriculars

Cognitive Circuits, Undergraduate Research Journal at McGill **September 2022 - Present**

Editor

- Editing undergraduate research papers concerning, computer science, neuroscience, psychology, linguistics and philosophy
- Conducting interviews with graduate students about their research in these fields

McGill Biomechanics Club **April 2022 - Present**

Research Member

- Current Project: Wearable Tremor Suppression Glove
- Researching Inertial Measurement Units
- Implementing Weighted Fourier Linear Combiner (WFLC) filter using Python

Girls Who Code, McGill Chapter **January 2022 - April 2022**

Facilitator

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

McGill Students for Parkinson's Awareness **September 2019 - May 2022**

- Informed patients of Parkinson Quebec resources
- Contributed to the organization of fundraising events
- Participated in fundraising events

Personal Projects

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

- Wrote a web application that depicts basic machine learning models using
- Models currently included are Linear Regression and Support Vector Machine (SVM)
- Wrote python script for each model, generating weights and costs per epoch

YouTube Data Analysis (Python)

- Queried YouTube API for data concerning my account
- Formatted data and extracted relevant information (most liked channel, least viewed video, liked, most viewed video liked etc.)
- Created animated bar chart showcasing history of liked videos.

Skills/Interests

- Computer languages (in order of proficiency): Python, Java, SQL, JavaScript, C, R
- Fluent in spoken and written English and French
- Interests: Software Engineering, Data Science, Computational Neuroscience, AI