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Education

McGill University Montreal, Quebec

B.A. & Sc, Double Major in Computer Science - Artificial Intelligence & Urban Studies

• Certifications: Canadian Securities Course, Canadian Securities Institute

Sept. 2020 - April. 2025 (Expected)

September 2023 - Present

Skills

Programming Python, Java, C,C++, Ocaml, Bash, JavaScript, MIPS Assembly, SQL/NoSQL

Libraries & Frameworks PyTorch, TensorFlow, Scikit-learn, Pandas, ROS & ROS2, React, OpenCV, NumPy, Django, Flask, Keras

Tools Excel, Microsoft Office, Adobe XD, MongoDB, Unix, Git, CMake, Arduino, Docker, Jupyter Notebook

Experience ____

Machine Learning Engineering Intern

OPENFOOD.AI Part-Time, Remote

· Leveraged GPT-3.5 API, PostgresSQL, and Apache Airflow to gather, standardize, and classify ingredient data

• Utilized TensorFlow and Keras to develop a hybrid deep learning recommendation model

· Deployed ML models on AWS SageMaker and designed a RESTful API for real-time recommendation serving

Project Manager Sept. 2020 - Present

AUTONOMOUS UNDERWATER VEHICLE (AUV) TEAM, McGILL ROBOTICS

Montreal, Quebec

Led a multidisciplinary team of 30+ engineering students to a top 15 position at the RoboSub 2023 Autonomy Challenge

· Procured over \$60k in funding to create an AI tool to assist McGill's research with monitoring underwater invasive species

• Executed an efficient development strategy, achieving milestones like the completion of 2 advanced PCBs, 7 new software packages, and 3 sensors

· Coordinated 100+ structured meetings throughout the academic year, facilitating in-depth design reviews and aligning stakeholder requirements

Software Engineering Intern

May - August. 2023

INDEPENDENT ROBOTICS, INNOVOBOT

Montreal, Quebec

- Designed a robust, end-to-end text-to-speech pipeline optimized for real-time operations, harnessing the power of ROS2, Python, and PyTorch
- · Analyzed geodetic time series data using advanced statistical tools in Pandas and sk-learn to evaluate the performance of predictive models
- Engineered high-performance pipelines for synthesizing navigation and imagery data into enriched video by leveraging SQL3, Python, and threading
- Integrated drivers for mission-critical sensors and segmented displays into the robot's localization stack using C++ and ROS2

Machine Learning Research Assistant

Jan - April. 2023

MOBILE ROBOTICS LAB, McGILL UNIVERSITY

Montreal, Quebec - Holetown, Barbados

- · Analyzed the performance of an autonomous robot on searching, tracking, and recovering divers amidst low-visibility ocean conditions
- Co-designed the machine learning pipeline enabling a reinforcement learning agent using tools such as Python, PyTorch, ROS2, and Bash.
- Developed computer vision models capable of detecting scuba divers in both the ocean and in simulation using YOLO v7, achieving above 0.92AP

Mergers & Acquisitions Intern

May - Aug. 2022

· Developed financial models in Excel, analyzing potential acquisitions for alignment with Valsoft's acquisition strategy.

Montreal, Quebec

- · Conducted due diligence for acquisition targets, evaluating over \$100 million in assets and identifying potential risks and synergies.
- · Headed an overseas research team, optimizing due diligence and target identification for 6 M&A groups.

Equities Analyst Intern

May - Aug. 2021

Whistler, British Columbia

LENNOX MCNEELY

VALSOFT CORPORATION

- · Analyzed and reported on small-mid cap IT companies listed on the TSX and TSXV, in addition to passing the Canadian Securities Course
- · Produced charts of time-series data from TR Eikon with Excel and Python to gauge the 5-year performance of prospective securities
- · Achieved an average 3 month portfolio return of 18.3% over 3 months and outperformed the S&P 500 by 11% over the same period

Coding Projects

Rate My Fit, McHacks 10 🔘

Python | JavaScript | Flask | PyTorch

Jan 28-29, 2023

A WEB-BASED MACHINE LEARNING TOOL FOR RATING OUTFITS Inverted Pendulum Game, COMP 417

Python | OpenCV Nov. - Dec. 2022

SELF-BALANCING POLE AGENT WITH REINFORCEMENT LEARNING AND A PID CONTROLLER

Python | TypeScript | NextJS

Intelligent Schedule Builder, CSUS Mentorship Program 🔘

A FREE WEB APP TO HELP MCGILL STUDENTS PLAN THEIR COURSE LOAD FROM FRESHMAN TO SENIOR YEAR

Oct. - Dec. 2022