485 Pringle Ave
Milton ON L9T8A9

Matt Vernooy

(905) 483-4203
mattvernooy@gmail.com
LinkedIn
Personal Website

Employment

Software Engineer, Intern **Aercoustics Engineering** **May 2022-August 2023**

- Built Python tools for in/house use
- Ensured codebase had robust test coverage, maintained CI/CD pipeline
- Automated manually intensive workflows
- Integrated support for new hardware into company codebase
- Was asked to work part/time during my final school year
- Also asked to speak at recruitment seminars after returning to school, a job usually done by the current intern

Software Engineer, Intern **First Media Group** **Summer 2021**

- Gained familiarity with Javascript, React, HTML, CSS, and networking.
- Used these technologies to implement a video calling feature for the company's dating app.
- Debugged networking issues using wireshark.

Intern **Frontier Networks** **Summer 2020**

- Tested and refurbished Juniper switches using Linux command line.
- Managed inventory organization and shipping.
- Assisted technicians in configuring new switches.

Education

Toronto, ON **University of Toronto** **Fall 2019 – May 2024**

- Bachelors of Applied Science in Computer Engineering, May 2024. Dean's Honour list in 2024. Entrance Scholarship.
- Certificates in Business and Artificial Intelligence.
- Design Teams: Spark, Pacbots
- Coursework: Algorithms and Data Structures, Fundamentals of Deep Learning, Artificial Intelligence, Machine Learning, Databases, Software Engineering, Computer Systems Programming, Computer Networks

Technical Experience

Projects

- **Breathing in VR** (2024). VR application that administers breathing exercises for anxiety treatment. Partnered with Lingnan University. Personally, wrote a multi-threaded C# application to synchronize communication across multiple Bluetooth sensors. Also wrote code and unit tests for updating the database with user and sensor data. C#, Python, mySQL
- **Trash Classification Model** (2024). Convolutional Neural Network (CNN) model for classifying images of trash as being composed of metal, glass, plastic, or medal. The moodel had a test accuracy of 80% and an average f1 score of 0.8. Python, Jupyter, Pytorch, Matplotlib
- **Autonomous Pacman Robot** (2024). For Pacbots team, programmed decision making and routing algorithms for autonomous Pacman robot. Team started from scratch, finished 2nd at UIUC, 5th at Harvard. Python

Languages and Technologies

- Python; C; C++; C#; Java; Javascript; React; HTML; CSS; Flask; SQL; Bash;
- Visual Studio; Eclipse; Jupyter; Vim; Docker; AWS; Git; Github; Jira; Agile Development;