485 Pringle Ave
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# Matt Vernooy

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LinkedIn
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## Employment

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

- Developed and maintained Python tools for in-house use, improving efficiency in daily tasks.
- Refactored legacy codebases and implemented comprehensive test coverage, contributing to a stable and maintainable codebase.
- Automated labor-intensive workflows, reducing manual effort and human error.
- Integrated support for new hardware, expanding the functionality of the existing codebase.
- Invited to work part-time during my final school year due to high performance.
- Invited to speak at recruitment seminars, a role typically reserved for current interns.

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

- Gained proficiency in JavaScript, React, HTML, CSS, and networking technologies.
- Implemented a video calling feature for the company's dating app, enhancing user interaction.
- Utilized Wireshark to debug and resolve networking issues, ensuring reliable application performance.

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

- Tested and refurbished Juniper switches using Linux command line, maintaining high-quality standards.
- Managed inventory organization and shipping, streamlining logistics operations.
- Assisted technicians in configuring new switches, contributing to smooth network deployments.

## 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
- Relevant 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). Developed a multi-threaded C# application for synchronizing communication across multiple Bluetooth sensors in a VR application designed for anxiety treatment. Also wrote code and unit tests for updating the database with user and sensor data. Technologies: C#, Python, mySQL, AWS
- **Trash Classification Model** (2024). Built a Convolutional Neural Network (CNN) model for classifying trash images into metal, glass, plastic, or paper categories, achieving 80% accuracy and an average F1 score of 0.8. Technologies: Python, Jupyter, Pytorch, Matplotlib
- **Autonomous Pacman Robot** (2024). Programmed decision-making and routing algorithms for an autonomous Pacman robot. The team started from scratch and achieved 2nd place at UIUC and 5th at Harvard. Technologies: 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;