Stefan de Lasa

Q destefy | in stefandelasa | ≥ stefan.delasa@gmail.com | 647-920-8916

EDUCATION

University of Toronto, Bachelor of Applied Science & Engineering, Computer Eng., 2020-2025 Seasonal GPA: 4.0/4.0, Cummulative GPA: 3.81/4.0 (Dean's Honour List)

Relevant Courses: Algorithms & Data Structures (ECE345), Matrix Algebra & Optimization (ECE367), Computer Networks (ECE361), Control Systems (ECE311), AI Fundamentals (APS360), Operating Systems (ECE344).

SKILLS

Programming: Python, PyTorch, C, C++, MATLAB, Javascript, Typescript, React, ARM As-

sembly

Dev Tools: Git, VSCode, Docker, AWS, K8S, SQL, Jenkins

Work Experience

Software Engineer Intern, PointClickCare (PCC), Toronto, ON

May - Aug 2022

PCC creates healthcare software to assist vulnerable populations with out-of-hospital care.

- Used **React** and **Typescript** in **Docker** environments to ease editing of patient screening templates. Several internal users mentioned improved usability from my work.
- Extracted user metrics and sent them to PCC's Pendo system to collect analytics for workflow improvements.

Data Management Intern, IESO, Toronto, ON

Jun - Aug 2021

As the Crown corporation responsible for operating/directing the electricity market in Ontario, the Independent Electricity System Operator (IESO) gathers and monitors data from industrial customers throughout the province.

- Prepared presentation to highlight uses of **machine learning** to improve existing processes.
- Recommended supervised learning for anomaly detection, using IESO's historical datasets.
- Worked with peers to review Meter Service Provider data, for meter billing report correctness.

Research Assistant, York University, Toronto, ON

Jul - Aug 2018

Permeable pavements are a promising method to control stormwater run-off. Dr. Usman Khan's group is investigating different Machine Learning (ML) techniques to categorize different paved surfaces.

- Conducted experiments to measure important properties of different paved surfaces.
- Analyzed and inputting results into a database for subsequent training by a ML model.

Selected Projects

Messaging App, Computer Networks (ECE361)

Nov - Dec 2022 🔗



Implemented multi-threaded client and server applications using TCP sockets in C.

- Users could create and join sessions, broadcasting messages to other users.
- Features included private messaging, listing active users, and basic password-protected login.

Dr. Mario game, Computer Organization (ECE243)

Jan - Apr 2022 🔗

Recreated the popular Dr. Mario NES game on a **DE1-SoC** board using **C** and the CPUlator simulator. Dr. Mario is a tetris-like game where you control falling pills to eliminate viruses.

- Designed algorithms to control inputs, collisions, and game behavior.
- Detected **interrupts** from a keyboard and timers.

Radio Transceiver, Hardware Design (ECE295)

Jan - Apr 2022 🔗

Designed, built, and tested 2 radio transceiver components as part of a 3 student team.

- Used **Altium** and **Multisim** to design limiter, filter, mixer, and amplifier receiver circuits.
- Demonstrated successful integration of our subcircuits into a functioning radio receiver.
- Communicated design rationale to technical/non-technical audiences through presentations.

Image Compression with SVD, Linear Algebra (MAT188)

Nov - Dec 2020 🔗

Explored use of singular value decomposition for image compression.

Extra Curricular

University of Toronto Supermileage Team (UTSM)

Nov 2021 - May 2021

The UTSM club is a student team dedicated to designing and building a highly fuel-efficient vehicle. I contributed to the electrical system design, including the turning indicators and windshield wipers.

OTHER

Citizenship: Canadian and American

Languages: English (Native Proficiency), French (Native Proficiency), Polish (Beginner)