

Samuel Weninger

✉ sam.weninger@mail.utoronto.ca
☎ 1 (647) 673 7919
📍 38 Grenville St, Toronto, ON, M4Y 1A5
🌐 samuel-weninger
📷 SamuelWeninger

Software

C++/C
Python
Javascript
SQL (PostgreSQL/MySQL)
Matlab
HTML/CSS

Frameworks

NodeJS
ReactJS
PyTorch
TensorFlow

Technical

Linux
Git
Bash
GDB

Experience

Huawei Technologies Canada

Software Engineering Intern (C++/C, Python, PostgreSQL, Linux, Bash, GDB)

Toronto, ON
May 2020 - Present

- Collaborated with a team of architects and engineers to develop a distributed database management system ready for use in 5G networks.
- Optimized storage and transactional aspects of a distributed database system, and made server-side modifications to fix and improve the efficiency of client-server database transactions.
- Assessed and evaluated functionality of database queries and transactions; uncovered, reproduced, and repaired underlying issues in database, and provided tests for these issues.

Holland Bloorview Kids Rehabilitation Hospital

Computer Engineering Research Assistant (C++, MATLAB, Arduino)

Toronto, ON
May-Sept 2019

- Designed, tested and implemented a data acquisition / biofeedback system capable of measuring and improving gait in lower limb amputees.
- Implemented a program to efficiently sort and analyze data returned from a biofeedback system.
- Developed algorithm to make accurate interpretations of readings from force sensing resistors.

Biomedical Engineering Research Assistant (C, Arduino)

May-Sept 2018

- Analyzed/measured parameters of gait in lower limb amputees and able bodied individuals.
- Proposed/developed methods of biofeedback based on measured gait parameters.

Awards

Dean's Honour List

University of Toronto
2017, 2018, 2019, 2020

Director's Summer Research Opportunity Award

IBBME, University of Toronto
Apr 2018

University of Toronto IBBME Award Winner

IBBME, University of Toronto
Aug 2018, Jul 2018

- Poster Award Winner, Elevator Talk Winner

Projects and Publications

Work Application (Javascript, NodeJS, ReactJS)

Work in Progress Web/Mobile Application for University Dating

Toronto, ON
Aug 2020 - Present

Samuel Weninger, Ali Seif Eldin

- Manipulated NodeJS components in Javascript to display buttons, login display and other visuals for front-end client use.
- Developed a secure password-hashing exchange between client and server for log-in/account security.
- Linked Google Firebase database to application for secure storage of distributed user information.

Jane Street Electronic Trading Challenge (C++, Python)

Finalist: Placed 2/100+ Undergraduate and Graduate Student Participants

Toronto, ON
June 2019

- Developed a trading algorithm to realize arbitrage opportunities in ETFs/ADRs and maximize profit in a simulated market with other teams.
- Established a TCP connection to Amazon EC2 Cloud server from a remote VM (Ubuntu Linux virtual box), developed trading algorithms (C++) to run on this server with other teams' algorithms.

Development and Assessment of a Wearable Biofeedback System to Improve Gait in Lower Limb Amputees (C++, Matlab)

Samuel Weninger, Rafael Escamilla Nunez and Jan Andrysek

Toronto, ON
May-Sept 2019
May-Sept 2018

- Submitted (Journal Paper, co-author, expected publication date: 2020)
- UnERD 2018 (Abstract, Poster, Undergraduate Engineering Research Day)

Education

University of Toronto

Bachelor of Applied Science
Computer Engineering

2021

CGPA

3.75/4

References

Dr. Jan Andrysek PhD, PEng

IBBME, University of Toronto; Holland Bloorview; LegWorks Inc.
jandrysek@hollandbloorview.ca; 1 (416) 978-1311

Rafael Escamilla Nunez MSc, PhD candidate

IBBME, University of Toronto; Holland Bloorview
rescamillanunez@hollandbloorview.ca