

Natanel Roizenman

Computer Engineering Student

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Languages

C++
VHDL

C#
SQL

Java
Python

JavaScript
MATLAB

Tools

NodeJS
Microsoft Office Suite

Git
Trello

Jira
Windows

Visual Studio
Linux

Professional Experience

IT Specialist, B.H. Day School

Toronto, Ontario

Jun 2019 – present

- Identified an inefficient security badge system and workflow, developed an **Electron-based applet in JavaScript** using **NodeJS**, and successfully reduced time spent by over 95%.
- Streamlined management of 1200+ Google domain users and devices by writing scripts and extensions with **Google Apps Script**, resulting in reduced workload across the entire IT department.
- Eliminated the need for a costly CMDB by writing a Python script to sync data between **Freshservice** and **Google Admin Console** using their **APIs**, saving thousands of dollars annually.
- Enhanced executive decision-making by generating reports using **Python**, **pysqlite3**, and **MongoDB** for presentation to executives.
- Provided remote maintenance for projects part-time during university, contributing an average of four hours per week to ensure seamless project continuity.
- Led a large-scale computer upgrade project by rebuilding 40+ desktops, ensuring up-to-date technology for the organization.
- Troubleshoot systems for dozens of clients daily, contributing to smooth functioning across the domain.

Volunteer, Hack the North

Waterloo, Ontario

Sep 2022

- Contributed to the smooth operation of Canada's Largest Hackathon.
- Ensured site security by overseeing a team of fellow volunteers and engaging with participants.

Projects

Portfolio website

Mar 2023

Built a CLI-themed portfolio website using **JavaScript** and other relevant technologies, showcasing creativity and passion for programming while displaying web development expertise and previous projects.

E-reader

Nov 2021

Built a custom e-reader by designing a device using a **Raspberry Pi Pico microcontroller**, writing firmware in **C++** to interface SD card reader and e-ink display using **SPI**, and assembling all components into a 3D-printed case.

Automated birdfeeder

Sep 2022

Developed an automated birdfeeder using circuit schematics in **KiCad**, powered by an **STM32**-based microcontroller, and wrote code in **C++** utilizing **STM32Cube HAL** for efficient operation.

Aim-training game

Nov 2020

Created an engaging aim-training game using **object-oriented programming (OOP)** principles in **Java** and implementing a user-friendly GUI with **Swing**.

Minesweeper in Google Sheets

Nov 2022

Implemented Minesweeper in **Google Sheets** using standard formulas and **Apps Script**, showcasing creative problem-solving and technical expertise.

Other skills

Agile
Embedded systems

Object-oriented programming
Troubleshooting

Soldering
Wildlife photography

Prototyping
Russian (fluent)

Education

Pursuing BAsC in Computer Engineering, University of Waterloo

Waterloo, Ontario

Sep 2022 – Jun 2027