

Natanel Roizenman

Computer Engineering Student

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Languages

C/C++

VHDL

Python

SQL

Java

Bash

JavaScript

MATLAB

Tools

NodeJS

Microsoft Office Suite

Git

Trello

Jira

Windows

Visual Studio

Linux

Professional Experience

IT Specialist, Bialik Hebrew 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