Erik Langille

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Professional Experience

Motorola Solutions
Software Engineer (Systems) Co-op/Intern
Jan - Aug 2021

Video Security & Analytics - Avigilon —
- 10x accuracy improvement for assessing system limitations (cameras, recording appliances, video management software) by revamping testing of the stack to be automated using Python and C#
- Redesigned team internal reporting to have an intuitive layout using web technologies (HTML, CSS, Python, Flask)

Prince Rupert Port Authority
Data Analytics Co-op/Intern
May - Dec 2020

Digital Business Division —
- Increased data reliability, reduced server load, and saved more than 10 hours of administrative work per week by designing a SQL data warehouse solution with C#
- Informed executives about a new proposed revenue structure by building map charts using Jupyter notebooks with Python and Matplotlib

Design Team

UBC Mint - Brain Computer Interfaces
Software Team
Mar 2021 - Present

- Enabled a brain controlled smart home by creating the user visual interface in JavaScript, HTML, CSS
- Designed communications between the EEG brain headset and the computer in Python

Education

University of British Columbia
BASc Electrical Engineering
Sep 2017 - April 2022

Emphasis on computer science classes including data structures, algorithms, deep learning, statistics, and computer architecture

Side Projects

Elderly Communication App 🔗
For Hack the North 2021 Hackathon —
- Focused on reducing loneliness in elderly family members by providing them a presentation of tailored photos and messages from their relatives
- Designed simple, user-focused elements in Figma and implemented the design in React with a Node.js backend and a SQL Server database

Full Stack Portfolio Website 🔗
For uOttaHack 2021 Hackathon —
- Emphasized the story of a project from ideation to outcome by implementing a full stack focused portfolio
- Presented dynamic content by designing the app in TypeScript with a Node.js backend and a frontend in React

Neighborhood Matching Website 🔗
For UBC's nwHacks 2021 Hackathon —
- Proposed and implemented a dynamic website that recommends neighborhoods based on given preferences and budget
- Designed the algorithm to be informed by Craigslist rental listings, OpenStreetMap APIs, and stored the data in structured tables using PostgreSQL

Time Management Mobile App 🔗
- Increased personal time management by prototyping a multi-platform mobile app in Adobe XD and building it in Flutter
- Implemented account functionality and cloud data storage developed using Firebase's Authentication and NoSQL database solutions

Languages

Python; C#; SQL; JavaScript; TypeScript; HTML5; CSS; Some experience with Dart, C, C++, Rust

Technologies

Pandas; Matplotlib; Flask; Docker; Selenium; SQLite; SQL Server; PostgreSQL; React; jQuery; Next.js; Node.js; Figma; Sass; Flutter; Redux; Firebase