Kevin Puthanangadi

778-984-0408 kevinfp@student.ubc.ca /github/kputhanangadi /in/kputhanangadi kputhanangadi.com

SKILLS

Languages/Frameworks: Python | Java | C#/C++ | MATLAB | Verilog | ARM64 | SQL | JUnit5 | HTML/CSS
Software/Technologies: Git | Jira | FPGA | Simulink | Flask | OpenCV | Tensorflow | Keras | Pandas | Linux | SolidWorks
Soft Skills: Time-Management | Self-Awareness | Accountability | Communication

EDUCATION

The University of British Columbia **Expected Graduation: May 2025**

Bachelor of Applied Science in Electrical and Computer Engineering

- GPA: 3.65/4.0

EXPERIENCE

EPSON **May 2023 – Sept 2023**

Software Development Engineering Intern *Python | Jenkins | MATLAB | Simulink | Git*

- Solved challenging **distributed systems** problems as a member of the heads-up display team, combating pixel-warping in **EVs**
- Accelerated project timeline by **50%**, when applying **Simulink** modelling to virtual pixel displays generated within **MATLAB**
- Leveraged **Python** and **Jenkins** to automate workflows for **700+** users, resulting in **5%** faster developmental procedures
- Engineered comprehensive **unit tests** ensuring reliability/stability of new features and achieved **90%** statement coverage
- Refactored a firmware codebase to diminish **CAN** bus load by **20%**, additionally introduced more modularity

Robokids **May 2022 – Aug 2022**

Software Engineering Intern *C#/C++ | SQL | Agile | Git | Jira*

- Developed an autonomous system for storing projects in the **cloud**, while increasing storage allocation from **2TB** to **5TB**
- Reduced project internal timelines by **8 hours** monthly with a **.NET Core** web application in **C#** automating repetitive tasks
- Managed sysadmin duties including deploying **Proxmox** environment and migrating **SQL** databases across hosting platforms
- Proposed and maintained **ETL** pipelines to extract and transfer data, increasing production efficiency of new projects by **15%**
- Adopted **agile** software development principles by collaborating in a team setting applying **GitHub** and **JIRA**

PROJECTS

NeuralDrive | | **Jan 2023 – Apr 2023**

Backend Developer *Jupyter Notebook | TensorFlow | Keras | OpenCV | Raspberry Pi*

- Spearheaded development of a **computer vision** driving algorithm for autonomous course navigation and crash avoidance
- Adapted **Linux Lite** as a lightweight operating system, lowering vehicle's general response time by **0.72 seconds**
- Integrated real-time image processing utilizing a **neural network** which was trained with **TensorFlow** using custom test data and data generation scripts to recognize unknown track layouts

KCAL | | **Feb 2023 – Mar 2023**

Full-Stack Developer *OOP | Java | JSON | Swing | JUnit5*

- Implemented robust data validation and exception handling mechanisms, decreasing the number of bugs within the calorie counter application by **33%** consequently improving overall system reliability
- Designed an intuitive user-interface with **Swing**, added **JSON** data persistence, and applied **JUnit5** for rigorous testing
- Optimized performance by implementing a **quicksort** algorithm to obtain consumption data, reducing run-time by **9%**

SpotifyGo | | **Dec 2022 – Jan 2023**

Full-Stack Developer *Python | Flask | API | Git | HTML/CSS*

- Led a team of four to develop an application that generates an adaptive Spotify playlist dependent on commute distance
- Regulated back-end **template rendering** and performed session token API authentication utilizing **Python** and **Flask**
- Constructed custom classes to manage data from multiple **APIs** efficiently, improving data organization and retrieval

COURSEWORK

- Software Construction: **90%** fundamentals of software design, computational models, data structures, and testing
- Machine Learning: **88%** introduction to principles of machine learning, neural networks, and deep learning
- Linear Algebra: **96%** study of matrix theory, systems of linear equations, and canonical forms of matrices