Josiah Tsang

www.josiahtsang.netlify.app
jtsang02@student.ubc.ca | GitHub | LinkedIn | + 1 (778) 968-4589

EDUCATION

The University of British Columbia   Sept 2019 – Nov 2024
Bachelor of Applied Science (BASc.), Integrated Engineering (Computer & Electrical)

EXPERIENCE

Amazon   Jun 2024
Software Development Engineer Intern
- Incoming Software Development Engineer (SDE) Intern

Jensen Hughes   Sept 2023 – Dec 2023
Project Engineer Intern
- Collaborated with cross-functional teams in an agile environment, securing 25% more potential clients on a quarterly basis and resulting in 10% more performance driven solutions delivered to clients.
- Fostered seamless client communication, ensuring product development aligned 100% with client expectations and deadlines.

UBC Multifaceted Innovations in Neurotechnology (MINT)   Sept 2022 – Aug 2023
Software Developer
- Developed a CRUD app using the MongoDB, Express, React, Node.js (MERN) stack to process 1000+ EEG data points for a multi-disciplinary engineering design project focused on medical technology.
- Reduced EEG data analysis time by 30%, allowing signal processing researchers to focus on interpretation and design.

AirOps   Jan 2022 – Aug 2022
Software Automation Developer
- Built business databases and automations that streamlined client workflows, resulting in 20% increase in efficiency.
- Wrote scripts using JavaScript and Airtable API to retrieve data across multiple tables within a database for a retail client.
- Automated 40 task creations with condition-based trigger, saving an estimated 80 hours of manual work for a multi-phase retail project spanning 4 linked databases.

PROJECTS

Spatial Calculator | *TypeScript, React.JS, Node.js, Express, Axios, PyTest, AWS*   Jan 2024 – Present
- Built an intuitive spreadsheet interface utilizing AG Grid API, allowing users to visualize and manipulate data 15% faster compared to traditional JavaScript libraries.
- Integrated testing using PyTest and Axios to simulate HTTP requests, ensuring 99% API functionality reliability.
- Deployed the backend API on an AWS EC2 instance to handle up to 100 concurrent user requests per second.

Project Management System | *Next.js, Node.js, Auth0, NodeMailer, MongoDB, AWS*   Jun 2023 – Aug 2023
- Integrated Next.js with MongoDB for scalable database management, capable of handling over 500 active project requests.
- Implemented user authentication through Auth0, allowing secure access to sensitive project and client information.
- Leveraged NodeMailer to achieve administrator privileges for automating notifications for project status requests.

ScorePort | *Kotlin, C++, Android Studio, Figma*   Sept 2021 – Apr 2022
- Established Bluetooth Low Energy (BLE) communication with range of up to 10m for efficient transfer between the Android app controller and MCU on a connected thread.
- Utilized serial communication at a baud rate of 9600 bps to ensure reliable data exchange between the app and MCU.
- Designed a user-intuitive mobile app interface in Figma, featuring score display, shot counter, and countdown timer.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, C++, C#, Python, Kotlin
Technologies: React, Next.js, Node.js, Express, MongoDB, SQL, AWS, TailwindCSS, TensorFlow, Figma, Git
Coursework: Data Structures & Algorithms, Networking, Verification & Testing, Systems, Machine Learning