JAY CHUANG

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PROFESSIONAL EXPERIENCE

Full-Stack Software Developer
Qube Technologies 📅 Jan. 2022 - Present
- Played a pivotal role in a fast-growing startup focused on emissions reduction.
- Developed a CSV export feature within the user interface, enabling extraction of over 1 million lines of data from the database.
- Implemented real-time data fetching, utilizing a REST API and a scheduled lambda function to synchronize 100+ JSON data entries every 15 minutes.
- Engaged in the full development lifecycle, including requirements gathering, design, development, testing, deployment, and maintenance.
- Showcased proficiency in a diverse tech stack, including C#, ASP.NET Core, Postgres, React, Typescript, AWS, and time-series datastores like TimescaleDB.
- Ensured code reliability and effective bug resolution by writing unit tests using Jest and xUnit libraries.

Software Developer Intern
Office of the Auditor General of Canada 📅 Sep. 2021 - Dec. 2021
- Contributed in an agile project development team to deliver Service-Oriented Architecture for the Auditor General.
- Delivered feature-rich MVC-based interfaces utilizing Angular.
- Developed REST API services using Microsoft .NET Core.
- Designed batch scripts to automate embloyee-based processes.

PROJECTS

GoLF Compiler
https://github.com/JayChuang8/GoLF-compiler 📅 Jan. 2023 - Apr. 2023
- Created a full-stack compiler using C++ for a subset of the Go language into MIPS assembly code for x86-64 architecture.
- Designed and implemented a custom scanner, parser, semantic checker, and assembly code generator from scratch.
- Leveraged AST traversals for semantic checking and assembly code generation.

Mono-SLAM for Remote 3D Mapping
Capstone Project 📅 Sep. 2022 - Apr. 2023
- Collaborated on a team to design and implement a cost-effective 3D mapping solution using open-source Simultaneous Localization & Mapping (SLAM) libraries.
- Developed a user interface for remote robot control and initiated the modular pipeline suitable for single-camera robots.
- Attained an impressive 50mm accuracy in the generated 3D point cloud compared to the real-world environment.
- Reduced mapping and navigation expenses for remote rooms by 80%.

Appoinment Scheduler Web Application
https://github.com/JayChuang8/AppointmentScheduler 📅 Apr. 2021 - Dec. 2021
- Architected a robust web application for a massage therapy business using ASP.NET Core MVC, C#, SQL, JavaScript, HTML, and CSS.
- Engineered a comprehensive appointment booking system that includes authentication, user roles, and API integration.
- Application published to Azure, and hosted it on MyWindowsHosting.
- Demonstrated expertise in full-stack development, database design, security, and cloud deployment.

Personal Portfolio Web Application
https://github.com/JayChuang8/JayChuang8.github.io 📅 Oct. 2021 - Nov. 2021
- Developed and implemented a personal portfolio showcasing 5+ projects using Angular and Typescript; increased website traffic by 50% and received recognition from industry peers.
- Integrated version control with GitHub, hosting it on GitHub Pages.
- Demonstrated strong frontend development skills and UI/UX design.

EDUCATION

Bachelor of Science (BSc)
Major in Software Engineering
University of Calgary
📅 Sep. 2018 - Apr. 2023

SKILLS

Languages

C#	Javascript/Typescript
C/C++	Python
Java	HTML/CSS
Batch	PHP

Tools/Technologies

React.js	.NET Framework
Angular	PostgreSQL
Mobx	Git
Docker	TCP/IP
AWS	Hadoop/Apache Spark

Personal
- Excellent interpersonal communication skills.
- Engaged & willing learner.
- Logical problem solver.

ACHIEVEMENTS

- Dean's List (2020-2021)
- Jason Lang Scholarship (2019, 2020, 2021)
- Schulich School of Engineering Entrance Scholarship (2018)
- Completed Grade 10 Piano exam with the Royal Conservatory of Music.

RELEVANT COURSES

- Software Project Management
- Database Management Systems
- Software Testing, Reliability, and Quality
- Data Science for Software Engineers
- Data Structures, Algorithms, and their Applications
- Principles of Operating Systems
- Computer Networks

INTERESTS

- Learning new software languages and technologies.
- Artificial intelligence.
- Personal investing in the stock market.
- Playing basketball, golf, and soccer.