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in jalexwhitman
jalexw

J. Alex Whitman's Résumé
Full-Stack Software Developer

I am looking for full-time or contract work where I can leverage both technical expertise (5+ years experience building frontend and backend systems) and strong interpersonal skills to accelerate impactful projects.
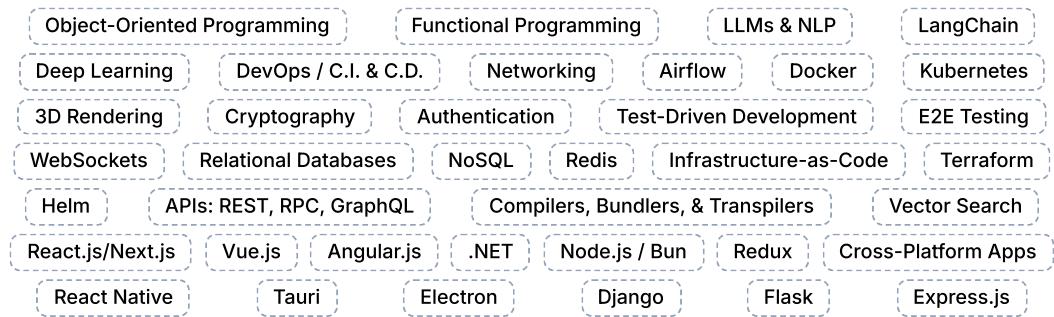
Education & Certifications

Western University — 2022	Google Cloud — 2023	Google Cloud — 2023	Halifax Grammar School — 2018
Bachelor of Science • Major in Computer Science • Minor in Medical Science	**Professional Machine Learning Engineer**	**Associate Cloud Engineer**	**International Baccalaureate Diploma**

Programming Languages

🥇 TypeScript, Rust, Python, HTML, CSS, Shell Scripts, SQL

🥈 JavaScript, C, C++, C#

🥉 Java, PHP, Perl, R

Technical Skills

Object-Oriented Programming · Functional Programming · LLMs & NLP · LangChain · Deep Learning · DevOps / C.I. & C.D. · Networking · Airflow · Docker · Kubernetes · 3D Rendering · Cryptography · Authentication · Test-Driven Development · E2E Testing · WebSockets · Relational Databases · NoSQL · Redis · Infrastructure-as-Code · Terraform · Helm · APIs: REST, RPC, GraphQL · Compilers, Bundlers, & Transpilers · Vector Search · React.js/Next.js · Vue.js · Angular.js · .NET · Node.js / Bun · Redux · Cross-Platform Apps · React Native · Tauri · Electron · Django · Flask · Express.js

Selected Work Experience

Aycoutay Technologies Ltd., Software Developer — 2024 Full-time, 2025 Part-time
- Built an app for electrode data collection, and real-time data analysis + visualization; a cross-platform Mac+Windows+Web app (Next.js/React.js/TypeScript/TailwindCSS/Redux, wrapped in a Tauri/Rust webview to collect data via native hardware driver).
- Rewrote Windows-only Visual Basic + C# USB driver as a cross-platform Rust driver (using rusb) to interact with hardware.
- Set up Auth0 authentication, RBAC, and a tRPC (full-stack type-safety) Node.js API to store electrical readings in MongoDB.
- Evaluated, built, and deployed biological age models (including k-NN, CNN, RNN, etc.) from electrode measurement dataset.

SolutionInc Ltd., Software Developer — 2019 May-August, 2023 March-September
- Built customer and staff portal applications (using tech such as Angular.js, Express.js, Next.js, SQL) for a new ISP company to allow controlling and monitoring network + IPTV services + managing subscriptions with Chargebee. Designed and implemented high-availability Kubernetes cluster to host web applications across Proxmox cluster. Automated deployment w/ Helm & GitLab.
- Upgraded a legacy LAMPerl-stack network monitoring dashboard to use containers, Cypress E2E testing, GitLab C.I./C.D. Added a report editing feature to allow customers to customize their hotel/convention center network gateway usage reports.
- Returned in a software development position after working for a summer on the support & delivery team as a student, where I mostly worked on staging hardware with proprietary software for allowing secure in-room media casting in large hotel networks.

Praxes Medical Group Ltd., Software Developer — 2021 May-September
- Maintained and updated their serverless COVID testing software for public rapid testing sites and B2B employer-led testing; facilitated the reporting of 300,000+ test results to patients, as well as aggregate statistic reports to stakeholders.
- Upgraded Firestore database to allow more performant result querying and storage of additional information about each test.
- Designed and implemented volunteer registration system w/ Firebase Cloud Functions, Firestore database, and Vue.js app.

Race Auto Group Ltd., Software Developer & Service Desk Coordinator — 2017, 2018, 2020, 2022 Summer Jobs & Part-time
- Rapidly designed and implemented a Next.js/React.js rental car booking system for the dealership to capitalize on a local rental car shortage w/ a dynamic price-calendar system by vehicle type and embedded Stripe payment processing.
- Managed the service desk by creating work orders, ordering parts, resolving customer issues, and allocating mechanic time. Was responsible for keeping the company Wordpress website and integrated inventory system up to date.