

Jagan Kalsi

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Education

California Polytechnic State University — San Luis Obispo

2021-2025

Bachelor of Science in Computer Science - Focus in AI/ML

Relevant Coursework: Data Structures and Algorithms, Operating Systems, Object-Programming, Database Systems, Deep Learning, Embedded Machine Learning, Computer Vision, Computer Security

Technical Skills

Languages: TypeScript, JavaScript, Java, Golang, HTML, CSS, C#, Python, SQL, C

Frameworks & Libraries: Vue.js, Angular, Vite, Vitest, .NET, React, Node.js, OAuth/OIDC

Tools & Platforms: Git, Linux, Docker, Azure, AWS, MongoDB, Google Maps API, Stripe

Experience

Software Engineer

July 2025 – Present

ESChat (Remote)

- Architected and built real-time communications platform from end-to-end using Vue.js and TypeScript as the sole frontend engineer, launched to production on AWS, successfully supporting 1,000+ users at release
- Introduced automated unit testing with Vitest and strict TypeScript typing, raising test coverage to >80% and limiting production regressions
- Cut backend API calls by up to 10× by debouncing real-time audio control slider events to 50ms intervals, reducing the number of requests triggered by a single interaction from ~100 to ~10
- Integrated Google Maps API, enabling real-time location tracking for 1,000+ web users coordinating with a 600,000+ user mobile network
- Containerized the frontend using Docker and integrated automated tests into the CI pipeline, enabling consistent builds and reliable pre-deployment validation

Software Engineer Intern

June 2024 – June 2025

Providence Health and Services (Remote)

- Implemented PDF-to-DOCX conversion step within legacy document transformation pipeline, enabling OpenAI API integration to standardize formatting, rewrite policy language, and structure data across 1,000+ HR documents leveraging Azure Blob Storage
- Engineered Azure Timer Function (Python), automating document transformation hourly, enabling batch document processing via UI upload — replacing a manual one-at-a-time workflow with end-to-end automated ingestion and delivery back to UI
- Built employee search feature for platform digitizing manual, paper-based break tracking for 4000+ employees, enabling real-time department-scoped and organization-wide lookup via OData queries to internal microservices

Projects

GetDevLeads - Lead Generation Platform

getdevleads.com

- Built and launched GetDevLeads using Vue.js, Node.js, MongoDB, and Google Maps Places API, monetized via Stripe payments
- Designed a cost-efficient search architecture, aggregating multiple API requests per query and keeping worst-case cost per search to \$0.10–\$0.18
- Implemented a caching layer for API results in MongoDB by standardizing and hashing queries, and storing results for 1 week, reducing redundant API calls, lowering average cost per search, while maintaining fresh data
- Secured platform with JWT authentication, rate-limiting, strict CORS policy, email verification, and route guards, preventing unauthorized access and enforcing usage limits per user role

Open Source

vue3-google-map - Enabled strict Content Security Policy (CSP) compatibility for 300+ starred library used across Vue.js ecosystem - github.com/inocan-group/vue3-google-map/pull/358