

Jorge A. Avelar-Lopez

(510) 328-0032 | jorgeavelar98@alumni.stanford.edu | San Francisco, CA | linkedin.com/in/jorgeavelarlopez | github.com/jorgeavelar98

Software Engineer II, Microsoft

SKILLS

Languages: TypeScript, Python, C#

Full-Stack: React, Node.js/Express, REST APIs, Microservices, .NET

Cloud/Infra: Azure, Kubernetes, Docker, PostgreSQL, CI/CD

AI/LLM: LLM Integration, Prompt Engineering, Agentic RAG, GitHub Copilot, Claude Code

EXPERIENCE

Microsoft | Seattle, WA

Software Engineer II – Microsoft Fabric

May 2023 – Present

- Integrated an LLM-powered Copilot into the product UX for natural language pipeline authoring, debugging, and suggestions, used by 7k+ enterprise workspaces across 40+ global regions.
- Engineered an agentic RAG system for live-site incident triage via MCP, integrating Azure DevOps, Kusto, and Teams with tool-use for log queries and real-time context retrieval; cut issue triage from hours to minutes.
- Owned and built the full product UX (React/TypeScript) for workflow authoring and Git-based version control, enabling engineers to build, test, and deploy features end-to-end without any infrastructure setup.
- Collaborated with product managers, designers, and partner engineering teams across multiple product areas to deliver features end-to-end, from spec to production.
- Owned and shipped 20 production REST APIs enabling 7k+ workspaces to manage Python-based pipelines, cluster lifecycle, and workspace configuration across 40+ global regions.
- Engineered async execution for 202 platform APIs using message queuing and a background service to move cluster operations off the critical path, keeping response times fast at scale.
- Redesigned cluster delete pipeline, eliminating systemic resource leaks, saving ~\$1.27M/year, and improving delete SLA from 80.77% to 99.77%.
- Automated zero-touch region deployment pipelines, reducing regional rollout time from ~1 month to ~3 days and scaling service coverage from 22 to 40+ regions.

Software Engineer I – Azure Data Factory (ADF)

Sept 2020 – May 2023

- Built automated cleanup pipeline that removed 60M+ orphaned workflow records and runs continuously; cut regional database shard load by 70% and saved \$1.5M+/year.
- Built Git-based CI/CD integration for ADF Airflow, enabling version-controlled deployments and supporting thousands of daily pipeline runs.
- Added cluster health monitors and automated SSL certificate renewal for every deployment, eliminating cert-expiration outages and improving service availability.

Software Engineer Intern – Azure Networking / Azure Data

Summers 2017, 2018, 2019

- Built backend systems including a shared pipeline API for cross-factory execution; contributed across unfamiliar large codebases each summer.

PROJECTS

CareerSignal.org – Multi-tenant Career Guidance SaaS

- Multi-tenant career SaaS (React/TypeScript, Node.js/Express, PostgreSQL) with RBAC, audit logging, a scoring pipeline using O*NET data, and PDF/CSV exports; CI/CD via Vercel/Render.

Preordy.com – Vendor Preorder Platform

- Multi-tenant preorder platform (Next.js 14/TypeScript monorepo, Supabase/PostgreSQL, Google OAuth) with RBAC, deposit handling, and order lifecycle powered by Edge Functions deployed on Vercel.

Inscrivo.com – Restaurant Website SaaS

- Multi-tenant restaurant SaaS on Next.js 14/TypeScript; each client is a separate Vercel deployment with content in Supabase Postgres going live within 60 seconds of owner edits.

EDUCATION

Stanford University – B.S. Computer Science, June 2020