

JP Siler

Software Engineer · Applied AI · Full-Stack

Houston, TX · Remote · Open to relocation

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SUMMARY

Full-stack engineer who designed, built, and operates two applied-AI products with paying customers: a multi-tenant platform where businesses configure AI assistants over their own data, and real-time voice agents that screen applicants, answer calls, book appointments, and place outbound calls for small businesses. Hands-on with real-time voice pipelines, retrieval-augmented generation, schema-validated LLM outputs, and production safeguards such as tenant isolation, bias redaction, and audit logging.

Nearly five years as an applications developer at a Texas state agency (Node.js, Python, and Vue.js on Azure and AKS), including core work on the agency's AWS-to-Azure migration. Earlier, 15 years in manufacturing operations, including PLC and automation programming and supervising a 15-person maintenance department. B.S. in Industrial Engineering.

TECHNICAL SKILLS

- **Languages and frameworks:** JavaScript, Node.js, Python, React, Vue.js, ColdFusion, jQuery, WebRTC, WebSockets
- **AI and LLM:** OpenAI (including Realtime API), Anthropic Claude, AWS Bedrock, LangChain, CrewAI, retrieval-augmented generation, structured outputs, multi-agent orchestration, voice AI, vision AI
- **AI governance:** audit logging, multi-tenant data isolation, bias redaction, human-in-the-loop review, risk classification of regulated data
- **Cloud and DevOps:** AWS, Microsoft Azure, Kubernetes (AKS, EKS, kOps, kubeadm)
- **Data:** PostgreSQL, MySQL, MongoDB, Azure Cosmos DB, Amazon DocumentDB, Pinecone
- **APIs and integrations:** Twilio (voice and SIP trunking), Stripe, Salesforce
- **Other:** customer onboarding and training, instructional video, PLC programming, Lean Six Sigma

EXPERIENCE

Independent Software Products and Consulting

2018 – Present

Developer (self-employed)

Concurrent with full-time employment; evenings and weekends.

Designs, builds, and operates commercial software products; applied-AI products and client work since 2022.

- **Voice/Vision AI Platform** (2024 – 2026): voice AI platform where small businesses deploy phone agents that screen applicants, answer calls, book appointments, and place outbound calls. Serves paying customers.
 - Real-time voice agents bridging Twilio Media Streams to OpenAI's Realtime API over WebSockets, with a supervisor agent that hands live calls to specialist agents
 - Retrieval-augmented generation over each company's uploaded documents (chunked, embedded, Pinecone vector search) that agents query mid-call
 - Post-call pipeline on queue-driven Python workers: transcripts, Spanish-to-English translation, AI summaries, and branded PDF reports delivered through signed URLs
 - Bias filter that redacts protected-characteristic disclosures from candidate transcripts, recordings, and PDFs, combining LLM redaction and verification with a deterministic lexicon, plus an audit log of opt-outs
 - Human-in-the-loop review: staff approve AI-drafted call reports before they're finalized, with optional e-signature and SMS linked to the call
 - Automated phone provisioning: number purchase, Elastic SIP trunk routing, and import to the voice platform in a single flow

- Browser-based dialer (WebRTC) with dual-channel recording, transcription, and call history; outbound batch calling campaigns and calendar booking integration
- Prepaid credit wallet with an idempotent usage ledger and Stripe subscriptions; tenant-scoped company data; audit-logged support access to customer accounts, read-only by default
- **AI Form/Workflow Platform (2026)**: multi-tenant platform where businesses configure custom AI assistants over their own data. Serves paying customers.
 - Retrieval-augmented generation over uploaded knowledge bases
 - Deterministic computation over customer reference data, read-only by design
 - Schema-validated structured LLM outputs with bounded retry
 - Tenant data isolation, audit-logged autonomous agents, and risk-classification intake for regulated data
 - Metered usage billing; onboarding training and instructional videos for customers
- **Client engagement (2022 – 2023)**: built retrieval-based conversational AI over a construction company's proprietary field-labor database, powering customer-facing search.
- **CrewCollar (2018 – 2021)**: hiring platform for skilled trades, with work-sample portfolios and embedded video calls.

Texas Higher Education Coordinating Board

Nov 2021 – Present

Applications Developer

Contract via InfoStride Nov 2021 – May 2022, then hired directly. Continuous service on the same systems.

- Develops and maintains the agency's Texas OnCourse application suite and its successors as a full-stack developer, using JavaScript/Node.js, Vue.js, and Python on Microsoft Azure.
- Deploys, monitors, and troubleshoots production workloads on Azure Kubernetes Service, including ongoing maintenance of an AKS-hosted application.
- Core contributor to the agency's AWS-to-Azure migration, including MongoDB-to-Cosmos DB migration scripts and pre- and post-migration data validation.
- Contributed to upgrading the agency's Adobe ColdFusion applications from version 2016 to version 2021.
- Regularly explains technical issues and tradeoffs to non-technical program staff.

Anagh Technologies

Apr 2021 – Jul 2021

Contract Developer

- Front-end development (jQuery) and Salesforce integration for Coach and Kate Spade e-commerce sites.

Owens Corning

2006 – Jan 2021

Maintenance Supervisor

Fifteen years of progressive technical and leadership roles in manufacturing operations.

- Programmed PLCs for robotics and servo-motor control (2017 – 2021), building on automation systems work from 2013.
- Designed and implemented a kanban spare-parts inventory control system.
- Supervised a 15-person maintenance department and managed plant projects.
- Led Lean Six Sigma efficiency events.

EDUCATION

B.S., Industrial Engineering | Texas Tech University

Certifications

- Electromechanical PLC | University of Houston, 2019
- Full Stack Development | Covalence, 2020