Taylor Vance

https://www.tvprograms.tech
Austin, TX

Staff-level full-stack engineer with 12 years of experience owning architecture, development, deployment, and infrastructure. Proven track record of modernizing legacy systems, eliminating operational overhead, and removing pain points through pragmatic automation and system design.

Experience

Senior Software Engineer (Lead/Staff-level scope) — Engage2Excel

Oct 2013 – Present

- Sole full-time engineer responsible for architecture, development, deployment, and maintenance of multiple mission-critical applications.
- Planned and executed regular version upgrades across the stack (PHP, Node, Composer, MySQL, MongoDB, Angular), ensuring compatibility, security, and long-term maintainability.
- Informally led technical direction for the recruitment division, often consulted for architectural decisions and infrastructure planning.
- Contributed to early team effort converting internal applicant tracking system into a client-facing SaaS offering, enabling new revenue streams.
- Rightsized infrastructure to reduce costs without sacrificing performance.
- Automated developer workflows and deployment pipelines, reducing deployment time from minutes to seconds.
- Maintained near-zero downtime through thoughtful design, proactive monitoring, and automated failover.

Projects

Docker + Serverless — Infrastructure overhaul

Migrated a high-maintenance server-based monolith to a containerized, auto-scaling, self-healing platform using Docker and ECS/Fargate.
Reduced compute costs by 10% and virtually eliminated operational overhead.
Executed the migration in-place during business hours with zero downtime or maintenance window and no impact to users.

AI Code Documentation and Q&A Tool — AI-powered support assistant

Built an LLM-based tool that auto-generates natural-language technical documentation for arbitrary codebases and enables semantic search via vector embeddings.
Users can ask questions about the application (e.g. "How does this feature work?" or "Why did X happen when I did Y?") and get context-rich answers.

The Bridge — Data sync layer for application migration

Architected a resilient, eventual-consistency pipeline leveraging AWS SNS and SQS for asynchronous data transformation.
Pipeline processed 500k–1M daily events with ~10s latency, enabling seamless parallel use of both legacy and new applications during an extended migration period.

Billable Items — Line-of-sight to upcoming revenue

Replaced a fragile, opaque billing process with a robust, reliable, auditable system that provides clear visibility into upcoming revenue.
Billable items are updated automatically, as billable actions occur in the system, ensuring accurate and timely billing.

Loops — Internal notification system

Built a notification/messaging system in our staff application to reduce email clutter.
My first solo project, completed while new to the company and tech stack, delivering value within weeks of joining.

Education

B.S. Applied Mathematics — University of Central Arkansas

Aug 2008 – May 2012

- Magna cum laude
- Minor in Computer Science

Skills

- Full-stack development
- AWS (ECS, EC2, Autoscaling, API Gateway, Lambda, S3, CloudWatch, SNS, SQS, DynamoDB)
- Docker, CI/CD pipelines, serverless architecture
- Bash scripting, Git, DevOps practices
- LLM integration, vector embeddings, semantic search
- Cost optimization, site reliability, performance tuning, fault tolerance
- Observability (CloudWatch dashboards, metric alerts, log analysis)
- Event-driven, distributed systems design
- Developer tooling and automation
- PHP, Python, JS/TS, HTML/CSS, SQL, NoSQL, REST, Angular, React, VueJS, .NET, C#

Certifications

- AWS Certified Solutions Architect – Associate
- AWS Certified Cloud Practitioner