Patrick Golden

Senior Staff Engineer

public@chrysus.dev Tokyo, Japan chrysus.dev linkedin.com/in/goldenpatrick/
github.com/GoldenChrysus

Summary

Staff engineer and tech lead with diverse **programming, database, AI/LLM, and cloud skill sets**. Contributions have led to **measurable revenue growth**, including a quadrupling in product contract values, through system improvements that exceed client expectations. Substantial experience in **enterprise software engineering** for **fintech and edtech**.

Experience

Clearwater Analytics, Beacon Tokyo, Japan
Core and AI Engineer 08/2022 to Current

- Architected cloud-agnostic **LLM and agent framework** supporting 20+ concurrent AI agents with task visualization, role-based permission controls, and comprehensive **telemetry logging**, enabling **secure enterprise AI adoption**.
- Built **graph-based task orchestration framework** processing **50K+ daily pricing calculations** for complex financial derivatives, reducing computation time by 62% compared to legacy workflow.
- Developed automation tooling using **Terraform and MongoDB scripting**, automating production instance upgrades and AWS/Azure resource provisioning across dozens of client deployments, **reducing onboarding time from 2 weeks to 4 hours** per client.
- **Mentored 3 summer interns** through hands-on architecture and systems design, with most intern-led projects adopted into production systems.

Focus School Software St. Petersburg, Florida, United States
Senior Staff Engineer 10/2016 to 08/2022

- Spearheaded firm-wide **AI modernization initiative**, shipping 5 client-facing LLM features and 3 internal **AI workflows** that drove **$2M+ contract wins** and reduced support ticket resolution time by 45%.
- Architected and led **enterprise-scale ERP development** serving dozens of educational institutions across the US, ensuring full **compliance with federal and state reporting mandates**.
- Developed **full-stack systems** using PHP, Laravel, TypeScript, PostgreSQL, SQL Server, and AWS; **designed APIs** handling 5M+ requests/day.
- Refactored legacy ERP codebase and shipped 40+ high-demand features (work orders, transportation requests, cXML punch out), enabling the firm to **increase product contract values by 4x**.
- **Led distributed team of 4 engineers** across 2 continents, establishing technical standards, code review processes, and mentorship programs that **improved feature velocity by 36% year-over-year**.

Skills

Languages
Python, TypeScript, PHP, JavaScript, C#, Java, Rust, Ruby

Concepts & Domains
LLM, AI, REST API, OAuth2, Microservices, Kafka, JSON:API, GraphQL

Databases
PostgreSQL, SQL Server, MySQL, MongoDB, ClickHouse

Cloud & Infrastructure
AWS, Azure, Google Cloud, Docker, Terraform, CI/CD, Caddy

Frameworks & Libraries
React, Next.js, Entity Framework, .NET Core, Laravel, Symfony, Apache Airflow, Flutter

Integration & Security
Stripe, BoxyHQ, SAML, OIDC, Vertex AI, Bedrock, Sentry, Opik, OpenTelemetry

Projects

Invoiced.ai
Technologies and domains: Rust, TypeScript, React, Next.js, PostgreSQL, AWS, Caddy, Stripe, BoxyHQ, REST API, SAML, OIDC

- Architected and built Invoiced.ai as sole engineer, leveraging **Next.js for multi-tenant UI**, Rust and Actix for core backend, **PostgreSQL for transactional consistency**, and AWS NLB with Caddy for high-availability TLS termination.
- Built core financial modules enabling SMBs to accept online payments, auto-bill clients, manage accounts payable/receivable, track time, track inventory, and automate client interactions.
- **Integrated with third-party platforms** such as ClickUp, Asana, and Monday to regularly import billable time.
- Used Caddy and AWS NLB to enable TLS termination and allow clients to use vanity domains.
- Integrated with BoxyHQ to implement self-service **SAML and OIDC configuration for enterprise** customers.
- Implemented **dual Stripe integration pattern**: platform-side payment processing and **white-label Stripe Connect** for SMB customers.

Education

Florida International University — Bachelor's degree
Computer Science — Florida, United States • 07/2020