

TAMARA (TJ) FREDRIKSON

Senior Software Engineer | SaaS Platforms | Legacy System Modernization

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SUMMARY

Senior Software Engineer with 25+ years building and stabilizing production systems: multi-tenant SaaS platforms, distributed web applications, and legacy platforms that have to keep running while they change. Full-stack across Vue.js, PHP, Python and Java, on AWS infrastructure. Ten years owning a platform serving 116 colleges. Incident response on an e-commerce platform processing \$6B+ annually. Deep expertise in WCAG 2.2 / ADA / Section 508 accessibility compliance.

Recent work includes AI model evaluation, task design, and domain-specific review for LLM training workflows.

SKILLS

Core Competencies: Full-Stack Development | System Design | Distributed Systems | Legacy System Modernization | Incident Response | Technical Strategy | Technical & Cross-team Leadership | Client & Stakeholder Collaboration | API Design | DevOps & CI/CD | Analytics & Reporting | WCAG 2.2 / Section 508 expert

Technologies: Vue.js | JavaScript & TypeScript | PHP | Python | Java | PostgreSQL | MySQL | REST APIs | Docker | Linux | Apache/Nginx | AWS (S3, RDS, Redshift, Glue) | Git | Bitbucket | CI/CD | Jenkins | PHPUnit | Laravel | SSO & Keycloak | JasperReports | Apache Superset | Prompting

EXPERIENCE

Web Developer Expert (Occupational Reviewer) — Sepal AI (acquired by Mercor)

Remote short-term contract via TJ Interactive, Inc. | November 2025 - March 2026

- Independent contractor providing web development domain expertise to improve models for a top AI lab
- Designed and evaluated domain-specific tasks for large language model (LLM) training and benchmarking
- Promoted to Occupational Reviewer and led the effort closing out the Occupation Reviews for Web Developers and related occupations after the acquisition

Senior Software Engineer — California Community Colleges Technology Center (Butte College)

Remote | July 2015 - October 2025

- Architected, built, and led development of multi-tenant SaaS platforms (C-ID, COCI) supporting 2K+ users and 300K+ submissions across 116 colleges
- Owned the full system lifecycle for ten years: architecture, hands-on development, deployment, maintenance, and operational stability
- Led the modernization of legacy systems and designed full-stack architecture, workflows, APIs, data models, and business logic for complex academic review systems
- Built and maintained an AWS data warehouse and ETL pipelines (Redshift, Glue, S3); enabled analytics via JasperReports and Apache Superset; maintained Jenkins CI/CD for AWS deployments
- Implemented authentication and authorization including RBAC and single sign-on (SSO); delivered interfaces meeting WCAG 2.2, ADA, and Section 508
- Led and mentored engineering efforts, coordinating system rebuilds across multiple applications

Software Architect (CTO / Technical Lead) — TJ Interactive, Inc.

Consulting & contract engineering, Remote | 2008 - Present

- Founded and run the consultancy: full-stack SaaS and web platforms for startups, nonprofits, and enterprise clients, working in the code alongside any team I lead
- Frequently engaged to modernize legacy systems, improve performance, and stabilize production environments
- Designed system architectures including APIs, data models, authentication systems, and deployment pipelines
- Built CI/CD pipelines for client development teams; owned infrastructure, performance, reliability, and database optimization on production systems

Selected Engagements

- **Bubliish** (2014 - present) — Architect and lead engineer for a full-stack publishing platform: backend systems, deployment workflows, git-managed releases. Led a distributed team
- **Simon Wiesenthal Center** (2013 - present) — Data export tooling and database-driven systems for a content management platform
- **ConvoSpark** (2012 - 2013) — Technical lead. Raised average project sold from roughly \$3,000 to over \$20,000

- **Trekkel** (2010 - 2013) — Lead architect of the patent-pending algorithm delivering tailored travel listings. Led the team building a JavaScript frontend and PHP backend
- **Golightly** (2008 - 2011) — Senior engineer on a multi-tenant social platform for three years, building or extending every product feature: maps, groups, profiles, forums, calendars, APIs, authentication, and RBAC

EARLIER EXPERIENCE

Partner & Consulting Engineer — Fenario

January 2000 - December 2008

- Advised musicians, artists, and promoters on web presence and e-commerce, frequently setting them up to manage their own hosted shopping carts and payment tools
- Built and hosted sites for independent clients, including the band Don't Push the Clown (members of Jefferson Starship, Frank Zappa's band, Sons of Champlin, and Sly and the Family Stone)
- Eight years of direct client work with image-conscious, non-technical clients, building the stakeholder skills the later enterprise work depended on

Director of Engineering & Lead Developer — Nacio Interactive

August 2005 - August 2007

- Lead architect and hands-on developer on every client project, running a small team of employees and contractors
- Delivered for enterprise clients including Pfizer, Wells Fargo, and Guide Dogs for the Blind
- Built accessible interface prototypes for Guide Dogs for the Blind, validated with blind power users and used to determine client requirements
- Migrated the Buck Institute from a proprietary Ektron CMS to open-source Joomla
- Produced cost and timeline estimates for new project bids; performance was measured on the gap between initial estimate and final hours worked

Consulting Engineer — Laszlo Studios

March 2005 - October 2005

- Brought in for Struts and e-commerce background to understand a major client's internationalization scheme and bridge it to Laszlo, an approach with little documentation at the time
- Built the reference demo (with some help from a Laszlo developer) showing how to drive a multi-national Laszlo application's displayed language from Struts resource bundles, selecting the language from the user's browser setting
- The client's senior engineering team used the demo as the template for their production build

Incident Response Engineer — Marketlive

September 2004 - March 2005

- Incident response and live-site engineering for a multi-tenant e-commerce platform processing \$6B+ annually across 150+ clients under strict SLA requirements
- Acted as engineering's escalation point when IT and managed services could not resolve live-site issues
- Reduced senior engineering involvement in incident response by 75% through process and system improvements
- Resolved production incidents, performance bottlenecks, and data integrity issues on a J2EE platform (Java, JSP, XML, SOAP, SQL)

Software Engineer, Intellectual Property Rights — RightsCenter (2000 - 2001) • **Build/Release Intern** — Andromedia, acquired by Macromedia, now Adobe (1999)

Reservist, Planner & Software Specialist — Federal Emergency Management Agency

September 1992 - December 1999

- Supported development, testing, deployment, and operation of a \$700M+ disaster assistance management system
- Delivered training, documentation, and system validation across multiple field deployments
- Two years of assignments in Micronesia: Guam, the Northern Marianas, the Federated States of Micronesia, and the Marshall Islands

EDUCATION

Master of Arts, Teaching & Learning with Technology (Online Educator) — Ashford University (now University of Arizona Global Campus), 2019

Graduate Computer Science, Databases — University of Illinois Urbana-Champaign, 2001. Master's-level coursework, admitted directly with no bridge program

BS Computer Science Equivalency (software track: Programming Languages) — San Francisco State University, 2000

BA Spanish (independent study: human linguistics) — University of Virginia, 1992