Julia Valenti

Product Engineer — Systems Design, Full-Stack & AI

Seattle, WA
juliavalenti.com
github.com/juliarvalenti
linkedin.com/in/jvalentipgh

SUMMARY

Product engineer with 7+ years of experience across UI, back-end, and data pipelines. Currently co-founder of Polaris Education and Engineering Technical Leader at Cisco Outshift. Focused on the product and architecture decisions around AI-assisted development: defining scope, designing systems that scale, and supporting customer-specific requirements within a consistent product.

SKILLS

Architecture	Multi-tenant data modeling, data lineage & privacy, pipeline orchestration, realtime (CRDT) systems
Front-end	TypeScript, JavaScript, React, Next.js, Vue.js, Tailwind, responsive & accessible UI, design systems
Back-end & cloud	Node.js, Python, PostgreSQL, REST & GraphQL API design, Dagster, Docker, AWS, Vercel, CI/CD
AI	LLM integration (Claude, OpenAI), LangGraph, Vercel AI SDK, agentic RAG, multi-agent systems, MCP

EXPERIENCE

Engineering Technical Leader — Cisco Systems · Outshift, Cisco's incubation group — Sep 2022 – Present

- Lead incubation projects from concept to product: run design-partner sessions, define scope, and set the architecture for small teams working with AI agents.
- **TOME:** co-designed and built an agent-maintained wiki covering 20+ projects and used for leadership reviews up to the SVP; designed its human/agent page-ownership model.
- **Mycelium:** built an open-source workspace where people and AI agents share memory, tasks, and discussion.
- **HAX (Human-Agent Experience):** designed interaction patterns for human-in-the-loop AI interfaces.
- Built UI for the **AGNTCY Agent Directory** (donated to the Linux Foundation with Cisco, Dell, Google Cloud, Oracle, and Red Hat) and architected **ActionEngine**, a browser and terminal automation agent.

Co-founder & Lead Engineer — Polaris Education — Jun 2025 – Present

With Human Restoration Project · Remote · polariseducation.ai

- Set product and technical direction for a platform that turns student interviews into evidence-backed reports for educators; adopted by 20+ school districts.
- Designed the data architecture: datalake as system of record, Postgres as index, and a lineage graph that governs revocation, attribution, and access control for student data.
- Built the analysis pipeline (Dagster, Modal GPU stages) from transcription and PII redaction to theme clustering, with spoken and written responses normalized to a single transcript contract.
- Built a shared realtime platform (14+ activities) and a typed, versioned report schema, supporting district-specific experiences with consistent rendering, privacy, and quote verification.
- Own architecture and code review, with codified conventions for AI-assisted development.

Front-end Software Engineer — ForAllSecure — May 2019 – Mar 2021

- Developed the web interface for Mayhem, ForAllSecure's autonomous fuzzing platform; partnered with product and design to overhaul core developer workflows.
- Drove a large-scale TypeScript and SCSS refactor that improved type safety and long-term maintainability.

Front-end Software Engineer — Guru.com — May 2018 – May 2019

- Migrated the platform from C# server-side rendering to a Vue.js SPA during a major redesign, improving load times.
- Built responsive, accessible layouts across devices and contributed to the coding standards and style guide.

IT Manager — Global/SFC Valve — Aug 2016 – Apr 2018

Built internal web apps for order tracking and plant analytics; led NIST 800-171 compliance work.

EDUCATION

B.S. Information Technology — Slippery Rock University of Pennsylvania — Dec 2016