



Education

Penn State University (Schreyer Honors), 2006-2010

Bachelor's in English and Marketing with 3.91/4.00 cumulative GPA

Phi Beta Kappa inductee

Work

Technical Director, Kettle, 2020-Software Development Manager, Kettle, 2014-2020 Back-end Developer, Kettle, 2011-2014

Directed and developed websites, prototypes, and apps for American Express, Apple, National Geographic, New York Sports Clubs, Sesame Street, SoFi, and Zocdoc

- Lead technical presentation for key client pitches and meetings, audits, and organization-wide forums
- Manage department with 15 technical team members—individual contributors and development managers—across the stack including QA, along with hiring pipeline
- Define benchmarks through documentation, performance and code reviews
- · Create efficient workflows with account, production, creative, and strategy teams
- Approve key decisions including system architectures, package and platform selection, and vendor approval, along with their supporting materials
- Oversee developer environment ecosystem using virtual machines and containers, and their associated infrastructure, including continuous integration and deployment

Open Source

Portable Wisdom (PyPI) — Instapaper EPUB generator in Python **Pinto** (Cargo) — SQL query builder in Rust **PlistParser** (npm) — XML Property List (.plist) parser in Node.js

Knowledge

Web application development: Complex applications using MVC frameworks (Django, Symfony) and self-hosted and cloud CMSs (Strapi, WordPress, Contentful) using object-oriented languages including PHP, Python with modern design patterns

Infrastructure automation: Provision and configure services across public cloud and PaaS providers using tools and playbooks to support and secure VM- and container-based web applications (Terraform, Ansible, Kubernetes), primarily on AWS

Architecture design: SSR and single-page applications with reverse-proxy load balancing, authentication and authorization, relational data stores (MySQL, Postgres), key-value cache, log aggregation, full-text relevancy-based search, JIT asset generation, adaptive-bitrate streaming video, service health monitoring, and CDNs

Performance and a11y: Apply benchmarks to improve end user experience through media compression, multilayered cache strategies, geo-distributed infrastructure, client-side optimization, and database design