

summary://

Full stack software engineer with 10 years of professional experience committed to continuously learning new skills, tackling new and complex problems, and being a leader in software craftsmanship and innovation.

skills://

Backend	Python / Flask / Postgres / Redis / OpenSearch / NGINX / GraphQL / SQL / NodeJS
Frontend	JavaScript / TypeScript / React / HTML5 / CSS / Tailwind / Cypress
Infrastructure	Kubernetes / AWS Services (Lambda, EC2, EKS, RDS, S3, Etc) / CI/CD via GithubActions / Celery / Docker
Tools	Git / Webpack / Pytest / Jest / Flask / ESLint / SQLAlchemy

experience://**Butterfly Network, Inc - Staff Software Engineer (2021 - Present)**

- Currently migrating an asynchronous job system to Celery to push medical images and information to hospital systems in a more scalable and observable way.
- Participating in a cross-functional group tasked with setting the vision for cloud engineering, prioritizing technical debt, adopting new technologies, and addressing engineering issues.
- Became a subject matter expert in DICOM, HL7, and FHIR to build and support systems that facilitate the transfer of medical information. Made changes to an open-source DICOM library to reduce the memory footprint by streaming large pixel data out of memory.
- Proactively improved the customer experience by making key optimizations such as identifying, analyzing, and optimizing expensive queries on the critical path and in some cases completely migrating tables. Query performance improvements decreased response times from minutes to milliseconds.
- Developed a CLI tool that enables developers to deploy their local code to an EKS cluster, significantly reducing cycle time. This tool speeds up debugging time from days to hours and allows live testing before merging into the main branch, helping to catch bugs and integration issues early.
- Championed a proposal to unify logging across cloud microservices to increase observability, enable more comprehensive alarming, and allow for quicker discovery of root causes of production issues.
- Onboarded and contributed to a SwiftUI app within 1 month. Wrote interactive animations and wizards using the IOS Animation framework.

Bloomberg LP - Senior Software Engineer (2016 - 2021)

- Technical lead for client facing projects in which I was responsible for collaborating with engineering and business teams, proactively identifying dependencies and risks, as well as contributing code. Successfully delivered three projects on time including one that led to an initial \$350K contract.
- Architected and led development on a modular React application that could be deployed within two separate enterprise portals by using the Context API to inject host specific implementations.

- Leader in the Bloomberg web community which involved providing guidance on best practices and contributing to inner source initiatives across the firm such as a shared component library.
- Developed several high traffic client facing JSON-LD REST API endpoints using Python, Flask, and Marshmallow allowing clients to search and request enterprise data.
- Optimized both the frontend and backend of a full stack web application. Examples include reducing the rendering of 70K+ items from minutes to milliseconds and reducing implementation costs of common tasks from weeks to days by re-architecting how we create CRUD features.
- Developed Jenkins CI/CD workflows to ensure reliable software releases. Workflows include automating the verification, packaging, and deployment of various software.

MCS Solutions - Software Developer (2015 - 2016)

- Migrated an application from inline JQuery scripts and styles to AngularJS v1.4. Pages were served via a mix of server side rendered HTML and client-side JavaScript.
- Utilized PHP Symfony and Doctrine ORM to serve AJAX requests to client side rendered pages.
- Modified an open source AngularJS chart library built on D3.js to display custom visualizations.

University at Buffalo - Teaching Assistant (2013 - 2015)

- Responsible for teaching weekly Java labs consisting of between 20-30 students each. Taught at least two lectures consisting of 100 students.
- Developed a real time 2D game engine in Java for students to easily create interactive programs to explore object oriented programming concepts.

volunteering://

- Landed a change to the NodeJS project to change C++ macros to compile time static expressions.
- Contributed to an open-source, browser-based robotic simulation designed to help students practice coding and robotics without the need for physical components.
- Assisted in online and physical classes meant to teach highschool aged students computer science. Answered questions and provided help with coding.
- Currently building a WordPress powered website for a local historical society to digitize research and provide local history online.

projects://

- Designed a website that allows programming LEDs frame-by-frame in real time. Features include an interactive timeline, automatic effects such as fade-in/fade-out, multiple scenes saved to a sqlite database, and a remote control interface to play, queue, and stop scenes.
- Designed modular light fixtures in CAD and 3D printed them. Wired and programmed LEDs running on a Raspberry Pi. Programs include a DFS visualization, snake animations with individual moving agents, and others controlled by physical buttons.

education://

University at Buffalo / B.S. in Computer Science / 2012 - 2016