

Patrick Lawrence

Full Stack Engineer

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Accomplished full stack engineer with a proven track record in modernizing codebases, developing software solutions across platforms, and delivering secure applications. Skilled in full stack web development with expertise in Angular, React, Typescript, and Java with additional experience with C, C++, .NET, and C# for high-performance desktop applications. Currently focused on modern web development as my core area of expertise.

EXPERIENCE

JetBlue, Remote, Long Island City, NY May 2024 - Present
Associate Full Stack Developer

- Spearheaded strategic technology decisions with other engineers for the check-in kiosk platform aligning technical direction with organizational goals and ensuring long-term system scalability and performance.
- Engineered rapid **POC demos**. The first showcasing expense cuts from using a new third party passport API, and the second showcasing a porting project of our **Angular** component library to a **React** version.
- Utilized Angular Elements to create a library of framework agnostic web components that we used while we were transitioning our codebase from Angular to React.
- Contributed to maintaining and extending a legacy Angular codebase while helping develop a modernized application to replace the legacy codebase; currently focused on building scalable API endpoints using **Nest**.

Career Development, West Chester, PA Sept 2023 - May 2024
Software Developer

- Created a full stack PWA using **Gatsby**, **Express**, and **Tailwind** from the ground up and deployed it using **Netlify**.

Gravic, Incorporated, Malvern, PA May 2022 - Sept 2023
Programmer I

- Led the removal and refactoring of the legacy **C++** library, Boost, from the codebase within a month, optimizing code quality and eliminating over 5000 redundant function calls.
- Engineered a **Java** application for automated UML diagram generation, providing a visual representation of class interdependencies within the codebase. This pinpointed 20 critical files with significant technical debt.
- Enhanced codebase build quality by identifying and resolving approximately 3000 compilation warnings, optimizing code performance and maintainability. This additionally improved build times by 50% on **Linux** and **Windows**.
- Developed a feature ensuring secure execution of **SQL** statements on **Oracle** and **ODBC** database targets by implementing parameterized queries with named fields, enhancing data integrity and security.
- Developed automated SQL procedures within Microsoft SQL Server to streamline the creation of triggers for the Shadowbase software, enhancing efficiency and consistency in data processing.

Universal Health Services (UHS), King of Prussia, PA June 2021 - August 2021
Software Engineer Intern

- Established and managed secure FTP connections for seamless transfer of critical data, including patient records and test results, among UHS network hospitals, improving data accessibility and information flow.
- Developed applications in **.NET WPF** using **SQL** and **C#**, showcasing proficiency in software development and database integration.
- Ensured strict compliance with HIPAA privacy regulations, safeguarding patient data and maintaining data privacy standards.
- Participated in collaborative sessions and contributed to UHS software engineering projects by working closely with the engineering team.

SKILLS

Languages: TypeScript, JavaScript, GraphQL, Python, SQL, Java, C#, C, C++

Frameworks: React, Next, Tailwind, Node, Nest, Express, .NET Core, .NET WPF, Blazor

Tools: MacOS, Linux, Windows, Git, Azure DevOps, GitHub, Visual Studio, Visual Studio Code, Idea, Netlify, Vercel, Heroku, Jenkins, Kubernetes, Jira

Databases: ODBC, MySQL, Microsoft SQL Server, Oracle, MongoDB, Db2, Sybase

EDUCATION

West Chester University, West Chester, PA Aug 2018 - May 2022
B.S. in Computer Science