

Joseph Baker

Sr. Software Engineer


Experienced Senior Software Engineer with expertise in full-stack development and agile methodologies. Proficient in leading diverse projects and adapting to new technologies, eager for a challenging software engineering role.

Contacts

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 (484) 786-3731

Skills

JavaScript

HTML

CSS

React

React Native

Python

TypeScript

Next.js

Node.js

Figma

AWS

Git

Command Line

SQL

MongoDB

Nextflow

Docker

Education & Learning

Web Development

Immersive

General Assembly, San Francisco, CA

Jan 2019 - Apr 2019

Bachelor of Business

Administration

Duquesne University, Pittsburgh, PA

Aug 2013 - May 2017

Sr. Software Engineer

Bluesphere Bio, July 2023 - Jan 2024

Spearheaded the development and optimization of sophisticated bioinformatics platforms, focusing on enhancing user experience, performance, and scientific data analysis capabilities.

- Created an online bioinformatics platform application using Nextflow, Docker, Next.js, React, Python and MongoDB to enable user-run bioinformatics pipelines, resulting in a developer-free, user-driven analysis environment.
- Orchestrated bioinformatics platform as a central data analysis hub, ensuring seamless integration with other sequence analysis platforms, thereby amplifying the data processing and analytical capabilities.
- Designed an intuitive user interface for the bioinformatics platform and organized pipeline results into a readable format, enabling easy access and efficient analysis for end-users.
- Led a team in managing and executing sprint planning for additional projects using Jira, driven by scientist-derived requirements, ensuring seamless integration, deployment of web applications, and timely task completion.
- Performed detailed reviews and approvals of pull requests from junior developers using VS source control options and GitHub Actions, ensuring high code integrity and optimal performance.

Software Engineer

Bluesphere Bio, Aug 2020 - July 2023

Led the design and development of an in-house TCR Sequence Analysis Platform and an innovative laboratory plate tracking system, significantly enhancing sequencing analysis and lab processes.

- Designed and built a custom TCR Sequence Analysis Platform using React, Python, and MongoDB, resulting in a sophisticated, high-performance tool for sequence analysis.
- Addressed a critical gap in laboratory plate tracking by developing an innovative barcode and electronic tracking solution with React Native, Python, and MongoDB. This software seamlessly integrated with lab machinery and other hardware, significantly enhancing the cell sorting process.
- Orchestrated the selection and integration of a modern technology stack including React and FASTAPI to replace legacy software, achieving a more efficient, user-friendly platform.
- Engineered a robust database architecture using MongoDB for the TCR platform and Lab Information Management System, notably improving data management, system performance, and scalability.

Web Developer

Mission Ceramics, Nov 2019 - Dec 2019

Led the development, deployment, and maintenance of Mission Ceramic's e-commerce website.

- Collaborated with a UI/UX designer to transform design concepts into a functional website, incorporating e-commerce features that enable seamless user purchases.