Andrew T. Biehl

TECHNICAL SKILLS

Technologies: Java, Python, SQL (including PostgreSQL, MySQL), Git, GitHub, Docker, Kubernetes, Jenkins, Kafka, Spring, Rust, Haskell, Ruby, Splunk, Prometheus, Grafana, Gradle, Flyway

DevOps, CI/CD, containerization and container orchestration, microservices, functional and OO principles, ag-Concepts: ile software development, scrum, test-driven development, trunk-based development, code review best practices, REST, GraphQL, relational databases, observability

Professional Experience

Optum

Technical Lead – Digital Health at Home

- Co-led the development of two back-end systems for supporting Medicare members: one that allows members to request in-home test kits and another that provides them with up-to-date personal medical history, relevant recommendations, and reminders
- Led the creation and refinement of the project backlogs for both aforementioned Digital Health at Home projects and evenly distributed this work across a team of six developers
- Operated as the primary liaison between our development team and the product owners, scrum masters, database administrators, and a third-party front-end development team
- Formally mentored four junior developers throughout the entire software development life cycle; presented on technical fundamentals, facilitated pair and group programming, provided monthly feedback, and led team retrospectives

Technical Contributor – Government Programs InnerSource

- Created and maintained multiple inner source libraries, tutorials, and proofs of concept on a range of technical topics such as Spring, database migrations, and Git hooks
- Frequently contributed to a variety of critical internal libraries, templates, and tools, primarily by way of patching bugs, refactoring, and reviewing others' pull requests
- Extensively documented important tools and practices on the department wiki in an effort to improve the developer experience
- Proactively engaged with peers on department message boards with a focus on improving developer culture; asked and answered technical questions, encouraged new developers to contribute to inner source, and fostered a friendly and welcoming workplace
- Participated in department boot camps as a technical mentor; helped train dozens of new hires on best practices, modern tooling, and day-to-day tips and tricks

Software Engineer – Enterprise Work Delivery Integration Layer

- Helped design an "integration layer" of microservices for aggregating incident tickets across dozens of lines of business, enriching these tickets, and forwarding them to a centralized system to await assignment to thousands of users
- Mentored multiple mainframe and junior developers on modern development concepts such as Kafka and container orchestration
- Independently designed and built a multi-format file processor and Kafka producer for converting from legacy batch processes to real-time data streams
- Facilitated a smooth onboarding process for the new lead developer as my core team transitioned to another project

Associate Software Engineer - Transportation Hub

- Contributed to the design of a system of microservices for fetching, storing, and presenting Medicare patient transportation data
- Implemented core components of both a web API and batch file processor as part of the Transportation Hub project
- Researched and developed a proof of concept SMB client for watching and interacting with remote file systems and leveraged this research to develop the aforementioned file processor
- Leveraged containerization technologies to design mock databases and remote file systems for use in automated integration test environments
- Helped introduce mainframe developers to modern development concepts, including microservices, DevOps, and CI/CD
- Helped prove the efficacy of the Government Programs Tech "Dojo" program, an experimental incubator program for junior developers, by driving the success of the first Dojo team alongside two other new hires

Sempervirens Fund

Tribute Program Intern

- Designed and developed a database schema, RESTful API, and web application for employees managing all data related to the organization's "Tribute" program, replacing a brittle spreadsheet-based workflow
- Wrote extensive documentation and non-technical resources to ensure the continued development of the project

Education

Carleton College

Bachelor of Arts in Mathematics

Northfield, MN June 2019

Los Altos Hills, CA

June 2019 - August 2019

Cumulative GPA of 3.93; Magna Cum Laude; Phi Beta Kappa; Distinction in Major; Dean's List 2016, 2017 Selected Coursework: Software Design, Database Systems, Algorithms, Data Structures, Theory of Computation, Linear Algebra

Minneapolis, MN June 2021 – December 2021

January 2020 - December 2021

January 2020 - April 2020

May 2020 - May 2021