# **Albert "AJ" Snow**

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### **Technical Experience**

Languages: Java, Clojure, PHP, C#, JavaScript, Rust, Python, C++

**Tools/Frameworks/Libraries**: Spring Boot, JUnit, H2, MySQL, MongoDB, Docker, Kubernetes, GCP, Node.js, Express, React, Git, PostgreSQL

**Skills**: Software Architecture, Database Design, OOP, MVC, API Design, Project Modeling, Algorithm Analysis, CI/CD, ETL, Functional Programming, Microservices, TDD, DevOps

## **Work Experience**

Backend Engineer 2022 - 2023

Peerspace

- Operated in several Clojure and JS (Node.js + Express) microservice web applications which utilized MongoDB storage and GCP hosting
- Led team initiatives to implement requested features for top clients
  - \* For example, calendar sync, resulting in 30% initial adoption and positive post-release feedback via CX team
- · Facilitated communication between services via two primary communication protocols
  - \* Direct calls were handled through restful APIs
  - \* Async calls leveraged Google's Pub/Sub architecture; typically to persist data in time-insensitive case
- Interfaced regularly with Kubernetes and Docker systems to deploy software images for testing and software releases
- · Collaborated with teammembers to create and scope design documents for new and legacy features
- Enhanced and standardized development environments via various initiatives (e.g. documentation, tests, dev configs)
- · Optimized, refined, and standardized MongoDB schemas to accommodate new feature development
- Debugged complex issues involving multiple over-the-wire processes across the system (e.g. when inconsistent data fired faulty events)

Software Engineer II 2019 – 2022

Paycom

- Perform full stack (JS/PHP) operations, including creating a backend API and writing user-facing scripts
- Utilized MVC style framework, OOP style design, and software was regulated (ISO 9001:2015, SOX, PII)
- Lead initiative to design a new core feature on our team that added ability to customize *all* fields on company position; widely adopted by clients after release
- Expand various module features by adding data customization, new workflows, and new api routes
- Push performance improvements such as code optimization, query aggregation, and ORM optimization (e.g. 100x speeds)
- Create DB designs based on feature requests and employ various data modeling and software design techniques
- Redesign the code structure in various parts of my code domain (e.g. refactoring code from 1k lines to 200)

### **Education**

Kansas State University (2019)

Bachelor of Science in Computer Science (3.8 GPA)

### **Projects**

Personal Website (CLJS, Fulcro)| A website using ClojureScript and the Fulcro framework for personal useSpring Boot State Machine (Java)| Exploratory projects in spring boot; I also implemented a pattern matching featureOrder State Machine (C++)| Example CLI state machine to experiment with core ETL concepts in C++Hotshot (CLJS)| Basic API to solve a fun math case; utilized Calva for Interactive Programming.Game Jam Unity Project (C#)| Small game built by me in a weekend featuring lightbulb-themed puzzle platformingThermal Modeling (Python)| College concurrency project; helped Graduate student parallelize modeling codeUtility Functions Library| Repo for experimental code concepts meant to be transferable between languages

Open source contributions made to Fulcro's Template here: github.com/fulcrologic/fulcro-template. I added the ability to compile and deploy a prod ready uberjar for a project when it's ready to be released.