# AJ Snow

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## Work Experience

**Backend Engineer**                                                                                          2022 - 2023
*Peerspace*

- Operated in several Clojure and JS (Node.js + Express) micro-services which utilized MongoDB storage and GCP hosting
- Enhanced features and 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 and mentored fellow engineers on my team to create comprehensive design documents for backend systems, typically for new feature development, or explore and understand legacy aspects of existing code
- Enhanced and standardized development environments by various initiatives
  - \* Updated or added outdated documentation across various services
  - \* Added dev configs to streamline and improve feedback/REPL loops
  - \* Added testing frameworks (e.g. Jest, clojure.test) and core tests to untested repos
  - \* Standardized deployment methodologies for versioning
- 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 2.5**                                                                                    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)
- Given lead role on new design to core team feature, 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)
- Attended weekly and (additionally) monthly "Tech Talks" to go over new team, company, or industry software practices

## Technical Experience

**Languages**: Clojure, Java, PHP, C#, Rust, JavaScript, Python
**Tools/Frameworks/Libraries**: MongoDB, Node.js, Docker, Express, MySQL, GCP, React
**Skills**: Software Architecture, Database Design, API Design, Project Modeling, Algorithm Analysis, ETL, OOP, MVC, Functional

## Education

**Kansas State University *(2019)***                                   *Bachelor of Science in Computer Science (3.8 GPA)*

## Projects

**Personal Website** *(CLJS, Fulcro)*       | *A personal website using ClojureScript and the Fulcro framework for personal use*
**Game Jam Unity Project** *(C#)*           | *Small game built by me in a weekend featuring lightbulb-themed puzzle platforming*
**Modded Minesweeper** *(Python)*           | *Minesweeper but I added a feature to subtract numbers based on flagging*
**Mobile App, Android** *(Kotlin)*          | *Simple app made from scratch to experiment with the Kotlin language on Android*
**Snake** *(Rust)*                          | *Built snake in Rust for exposure and to experiment with Rust's graphical libraries*
**2D Roguelike, Unity** *(C#)*              | *Featured tutorial in the Unity framework to build a simple 2D roguelike in the engine*

Open source contributions made to Fulcro's Template here: github.com/fulcrologic/fulcro-template