Albert "AJ" Snow

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Technical Experience

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

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

Skills: SDLC, Software Architecture, Database Design, API/REST, CI/CD, MVC, Declarative Programming, Microservices, ETL, OOP, Testing, DevOps, Polygot, Agile

Work Experience

Senior Software Engineer

Feb 2024 - Present

Center for Translational Data Science (CTDS) at University of Chicago

- Built and owned search saving API from design doc; 0 reported bugs post-release
- Developed 250+ tests across 6 services to stabilize code behavior and fix various logging anomalies
- Maintained Center's Fedramp Moderate compliance for all new code contributions, such as aforementioned API
- Exceeded expectations in first 3 months of employment; received high praise in first performance review
- Developed a metrics analysis tool for an AI research project; expected to reduce ingestion cycle from weeks to days
- Automated manual ETL ingestion workflow, reducing content delivery turnaround from 2 weeks to ~2 days
- Regularly participate in on-call activities for 30+ active services; e.g. PR review, debugging, and pipeline fixes

Back-End Engineer 3

April 2022 - June 2023

Peerspace

- Added an external calendar sync feature; resulted in an initial 30% adoption rate and client acclaim (via CX team)
- Developed 2 new technical design docs by collaborating with stakeholders to translate and scope features
- Added 130+ tests and established new company procedures to integrate TDD into services
- Added 1 field to the primary DB schema and removed 20+ redundant fields from other MongoDB schemas
- Regularly parsed and filtered through ~100k-1M system logs to identify and debug software faults

Software Engineer 2

June 2019 – March 2022

Paycom

- Led design of a core feature that allowed dynamic job field customization; reported adoption rate of 80% from clients
- Developed software features with a team size of ~17 in an 500k+ LOC domain
- Reduced development costs by abstracting code design; e.g. refactored code from 1000 to 200 lines
- Adhered to software and procedural regulations (ISO 9001:2015, SOX, PII) while developing and storing sensitive data
- Enhanced software services by developing 180+ endpoints for backend APIs, user-facing scripts, and ETL workflows
- Lowered client wait times up to 100x by optimizing code, aggregating MySQL queries, and tuning ORMs

SDET Internship

June 2018 - December 2018

Xpanxion

- Developed a prototype client project in Java in addition to taking 300+ hours of additional Java internship coursework
- Worked with a mentor to automate 100+ C# tests for clients; resulting in a ~15% reduction in cycle times
- Attended over 60 team sprint meetings; discussing project objectives, task focus, and implementation strategies

Education

Kansas State University (2019)

Bachelor of Science in Computer Science (3.7 GPA)

Projects

Personal Website (CLJS, Fulcro)
Spring Boot State Machine (Java)
Order State Machine (C++)
Hotshot (CLJS)

Game Jam Unity Project (C#)
Thermal Modeling (Python)
Utility Functions Library

| A website using ClojureScript and the Fulcro framework for personal use | Exploratory projects in spring boot; I also implemented pattern matching | Example CLI state machine to experiment with core ETL concepts in C++

| Basic API to solve a fun math case; utilized Calva for Interactive Programming.

| Small game built by me in a weekend featuring lightbulb-themed puzzle platforming | College concurrency project; helped Graduate student parallelize modeling code

| Code designs that are transferable between languages; inspired by lodash and clojure

Open Source Contributions

<u>Calva</u> Fulcro | Collaborated with the lead dev to squash a bug preventing windows users from quick-booting the plugin | Added a feature and documentation to the Fulcro template to build and deploy a production-ready uberjar