SOFTWARE ENGINEER AND ARCHITECT

James A. Gibson

PROFILE

With a decade of experience working with software and mostly in the health care industry focused on genomics, I have specialized in building software centered on designing enterprise architecture and systems built upon microservices in AWS. This work has been done in a regulatory environment (HIPAA, CLIA, CAP, HI-TRUST).

My works spans the entire software development life cycle, from ideation and design to implementation, testing, and deployment. I have designed and built continuous integration and continuous deployment pipelines, relational and non-relational databases, event-driven architecture with streams, data lakes, RESTful APIs, ETL pipelines, and software test automation. I use Python most frequently but have utilized other languages in past work.

I prefer to work with smaller teams that are lean and effective. I currently lead a team of platform engineers - backend engineers with an emphasis on DevOps culture to serve feature-focused development teams. I had a professional academic background in philosophy before switching careers into technology, which has been useful in designing software according to domain driven design principles.

EXPERIENCE

SOFTWARE ENGINEERING LEAD, GENOMIC LIFE: LA JOLLA, CA - MAR 2021-NOW

Building from the ground up as the first engineer under the head of engineering, I designed and implemented every one of the features of work history mentioned in the profile above for this company. Some further details:

- CICD built on top of GitHub Actions
- Cloud resource management through Terraform
- Code implementation in Python (much of it for serverless applications)
- Architected streaming platform for internal business use and external partners
- Integration with Salesforce via Boomi
- Built on top of AWS

FOUNDER, INSIGNE: LITTLE ROCK, AR - JAN 2020- MAR 2021

Designed and modeled processes for improving job recruiting based around specialization certificates, e.g., those offered by AWS, Microsoft, HashiCorp, etc. The idea was to give more privacy rights to individual users, but allowed recruiters and HR departments to more quickly find qualified candidates based on certifications from the companies qualified to test for competence, thereby reducing costs.

SR SOFTWARE ENGINEER, INVITAE: SAN FRANCISCO, CA - OCT 2019-NOV 2019

Worked on bug fixes and refactored implementations based on new requirements for the workflow team. Departed after a few weeks due to personal circumstances.

SR SOFTWARE ENGINEER, HUMAN LONGEVITY INC: LA JOLLA, CA – 2015-2019

Started as a software development engineer in test for two years, where I tested secondary analysis workflows based on genomic data and I tested APIs and various other tools. After two years I moved into development, where I built a data ingestion system based on AWS services, Docker, and K8 for incoming data at peta-byte scale. I designed and built a data lake and API interface for machine learning specialists and data scientists.

EDUCATION

2013. University of California, Irvine - MA Philosophy

CERTIFICATIONS

HashiCorp Certified: Vault Associate (January 2021 - January 2023)

HashiCorp Certified: Terraform Associate (November 2020 - November 2022)