# 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 testing and deployment. I have built continuous integration and continuous deployment pipelines, designed and built relational and non-relational databases, event-driven architecture with streams, data lakes, RESTful APIs, ETL pipelines, and software test automation. I have experience in one-thousand+ person companies with hundreds of engineers to smaller companies building software from the ground up. 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 across Amazon MSK for internal business use and external partners
- Integration with Salesforce
- 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. The goal was to improve privacy rights and expedite finding qualified candidates, thereby saving employers time and money.

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 S3, Docker, 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)