Carlton Duffett

Staff Software Engineer

carlton.duffett@gmail.com   linkedin.com/in/cduffett   github.com/cjduffett   carltonduffett.com

Domain & Skills

- **Python** - APIs and backend services, automation, async tasks, scripts, dependency management
- **Infrastructure as code** - Cloud infrastructure using AWS, terraform, config and secrets management
- **CI/CD** - Code analysis and testing, zero-downtime deployments, logging, monitoring and alerting
- **Authentication** - Session management, single sign-on (SAML, OIDC), user accounts
- **Containers** - Docker, multi-container services using docker-compose, load balancing and scaling
- **Data platform** - data orchestration tools like Dagster, Airflow, dbt; data ingestion, databases
- **Security** - experience with software engineering concerns related to banking data (HSA); PHI/PII regulated by HIPAA; SOC2 and HITRUST compliance; secure storage of user information

Experience

Amino Health

Staff Software Engineer

Backend/Platform Architect

2022 - Present | Responsible for setting the vision for Amino's backend services and platform. I design and deploy backend services, cloud infrastructure, data orchestration tools, networking and security as part of a small, agile software team. Mentor and coach junior engineers and new hires.

Recent projects include: Atlantis terraform CI/CD via GitHub pull request comments; provisioned Dagster company-wide for data orchestration needs; implemented parallel ingestion of many multi-terabyte "transparency in coverage" healthcare data files into Snowflake.

Senior Software Engineer

Engineering Manager

2019 - 2022 | Leader of platform and backend engineering teams. Focused on scalable hosting using Docker containerization, AWS ECS, load balancing, networking, CI/CD, code analysis, testing, monitoring and alerting. Led adoption of terraform infrastructure-as-code for managing AWS resources, permissions, services and tools.

2018 - 2020 | Implemented and operated HSA debit card program. Integrated Amino's platform with many third-party vendor APIs, created async processes for managing Amino's accounts, transactions, and reporting.

Software Engineer

2017- 2019 | Developed core features of Amino's user and authentication services, configuration API, internal admin tools, search. Single sign-on implementations - SAML and OIDC. File ingestion from vendors and partners, customizations, data validation, error reporting.

MITRE

Software Engineer

2016 - 2017 | Multiple short, grant-based projects funded by the CDC and NIH: Synthea - synthetic patient record generator using Ruby and Java; FHIR server using MongoDB and Go; patient record matching service using JavaScript and AWS lambda functions.

Education

Boston University

2012 - 2016 B.S. Computer Engineering

2014 - 2016 Technology Innovation Scholar (TISP), FIRST Robotics mentor
2013 - 2016 Teaching Assistant, EK127 Intro to Programming using MATLAB