

# Frank Alvarado

SOFTWARE ENGINEER

Houston, TX

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## Work Experience

### Optum/Rally Health

Houston, TX

SENIOR SOFTWARE ENGINEER

June 2021 - PRESENT

- Spearheaded DevOps transformation for the Dashboard Team, implementing a federated model with AWS and Terraform, reducing deployment time by 30%
- Architected and optimized CI/CD pipelines in AWS and Azure to improve release reliability and speed
- Developed full-stack features with React and Scala, including biometric and health activity modules, composing 40% of the codebase
- Engineered high-performance Scala microservices, increasing throughput by 20%
- Mentored and onboarded 5+ junior engineers, elevating team delivery and code standards

### The Judge Group - JP Morgan & Chase Co.

Houston, TX

SOFTWARE ENGINEER

Oct 2020 - Feb 2021

- Architected the Dealworks Java/Kafka platform, raising transaction throughput by 25% for JPMC's investment banking suite
- Enhanced system resilience—redesigned backend and messaging for 99.99% uptime under peak load
- Drove Agile feature sprints and triaged critical defects to meet aggressive release schedules
- Mentored and onboarded 3 developers—rolled out team-wide coding guidelines and automated test frameworks

### Macquarie Group

Houston, TX

SOFTWARE ENGINEER

Oct 2018 - Oct 2020

- Built a JBoss/BIRT service to automate OTC confirmations—5x contract throughput, 80% manual effort reduction
- Deployed AWS/GCP microservices for high availability (99.9%) and scalable performance
- Established end-to-end CI/CD pipelines, accelerating release cadence and minimizing rollback risk
- Developed React trading UI components and business logic, boosting trade capture accuracy

### Baylor Genetics

Houston, TX

SENIOR SOFTWARE ENGINEER

March 2018 - October 2018

- Engineered Java/Groovy LIMS modules, automating sample tracking and slashing manual lab tasks by 80%
- Established end-to-end CI/CD pipelines, reducing release cycles from days to hours
- Co-led bi-weekly deployments and standardized dev workflows to decrease integration issues
- Mentored junior developers—introduced code reviews and pair programming for rapid onboarding

### Citi

Irving, TX

SOFTWARE & SECURITY ENGINEER SENIOR ANALYST (AVP)

July 2013 - March 2018

- Led the Network Security Automation Tools Team, building McAfee-based scan workflows and a CSR microservice to cut manual work by 50%
- Architected REST/SOAP proxy blocklist APIs, significantly strengthening Citi's network defenses
- Engineered resilient Spring Boot/Tomcat/Jenkins microservices for vulnerability management across 1,000+ endpoints (99.9% uptime)
- Developed an end-to-end proxy validation tool, boosting routing test coverage by 40%
- Served as Skybox Security SME, guiding the migration to the next-generation security platform
- Mentored and onboarded 3 junior engineers, driving 75% of team project deliveries

## Skills

**Proficient** Java, Scala, AWS, Bash, REST, Kubernetes, Containerization (Docker), DevOps

**Familiar** Python, React, Terraform

**Technologies and Tools** Linux, Jenkins/Github Actions, Git, PostgreSQL, IntelliJ

## Education

### The University of Illinois at Urbana Champaign

Urbana, IL

MASTER OF BUSINESS ADMINISTRATION (MBA)

November 2019 - December 2022

### The University of Texas at Austin

Austin, TX

B.S. IN ELECTRICAL AND COMPUTER ENGINEERING

August 2009 - May 2013