

# Tyler Herron

Software Engineer | Dallas, TX

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## Experience

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### Software Engineer

#### Capital One

Dallas, TX

Aug. 2021 — present

- Developed suite of applications responsible for executing complex legally compliant and customer focused strategic communication strategies leveraging **Java**, **Spring Boot**, **Kafka**, **Drools**, and **AWS**.
- Modernized legacy architecture with **machine learning enabled** decisioning logic—reducing mainframe dependency, saving over **\$18 million** annually, and reaching **thousands of additional customers** daily.
- Architected new AWS-based distributed systems utilizing **EC2**, **Redis**, **Aurora**, **DynamoDB**, and **Lambda**.
- Collaborated across teams to onboard new customer populations, documenting processes to support self-service and enable personalized communication strategies for a **quarter million customers**.
- Established testing architecture standards to utilize of parallel features in contemporary unit and functional testing frameworks, reducing CI/CD pipeline testing time by over **75%**.
- Embedded with product stakeholders to improve **Splunk** logging and dashboards, then developed **Python** and **Bash** scripts to perform complex regression validations over **millions** of daily data points.

### Software Engineer

#### USAA

San Antonio, TX

Jun. 2019 — Aug. 2021

- Built and deployed over two dozen reactive microservices responsible for digital communication capable of **30 million message deliveries per hour**—over a **5,000%** increase in volume over the legacy system.
- Trailblazed development of reactive applications within USAA—building applications utilizing the **Lagom** microservice framework, **Akka** actor toolkit, **Play** web framework, and a **NoSQL**-based event store model.
- Developed an internal full-stack admin dashboard combining a **Spring Boot** backend with a **React Redux** frontend to streamline system monitoring and incident resolution for enterprise support staff.
- Architected and engineered a robust and customizable performance testing API to monitor and validate total system throughput leveraging **Taurus**, **Docker**, and **Kubernetes**.
- Led development on several automated batch jobs utilizing **Spring Boot**, **Kubernetes**, **Control-M**, and **CI/CD** to replace legacy functionality and automate manual hour-long triage processes.

### Software Engineering Intern

San Antonio, TX

May. 2018 — Aug. 2018

### Programming Mentor

#### Trinity University ITS

San Antonio, TX

Jan. 2018 — May. 2019

- Led a program to develop work-study jobs comprising self-led programming education and innovation.
- Curated **Python**, **Swift**, and **JavaScript** programs and grew the team to more than a **dozen** students.
- Built a set of web scraping utilities to serve as examples for the **Python** learning track.

## Skills

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### Languages

Java, SQL, Python, Scala, Javascript, Bash

### Technologies

Spring Boot, Kafka, AWS, Lagom, Akka, React, JUnit

### Certifications

AWS Certified Solutions Architect, Associate

Apr. 2022

## Education

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### Trinity University

San Antonio, TX

May 2019

- **Bachelor of Arts** in **Computer Science** and **Philosophy**; focus in **New Media**. **GPA: 3.7**
- Recipient of merit-based **Murchison Scholarship** and competitive **Tower Scholarship**.