Technologies

Java Kafka gRPC Cassandra Git Linux Protobufs Pivot Cloud Foundry Spring Boot Scala Spark Python Hadoop Racket

Skills

Big Data Processing Functional Programming Highly Distributed Systems NoSQL Object-Oriented Programming

Experience

Software Engineer at Google

07/2022 - 03/2024

- Created a system to prevent breaking changes from entering Google Search's critical features, using Python, Java, gRPC, and Google Protobufs.
- Desgined and implemented the system to alert appropriate teams when their changes could break Google Search, system was integrated into the binary release processes.
- Created stakeholder dashboards to track the number of breaking changes that were prevented.
- Led the team in the creation of our first stakeholder onboarding process and onboarded the first user to our infrastructure.
- Automated the process of catching breaking changes that could affect Google Search's Generative AI.

Vice President - Software Engineering at JPMorgan Chase & Co.

02/2021 - 07/2022

- Mentored and helped guide junior developers and new hires on the team.
- Responsible for debugging production issues as they arose using tools such as Dynatrace and Splunk.
- Integrated various technologies to meet product needs including, Java, Python, Scala, Pivotal Cloud Foundry, Spark, and Hadoop.
- Responsible ensuring our application maintained an SLO of 250 milliseconds even as we continued to scale to millions
 of customers.
- Gathered requirements and prioritized features to ensure we met the expectations of our clients and stakeholders.
- Architected and help implement various systems.
- Assisted with DEI recruitment and retention events.

Senior Associate - Software Engineer at JPMorgan Chase & Co.

02/2020 - 02/2021

- Part of a select group of people within the firm to work on the SBA PPP Loans project, the project helped automate the process of getting government loans to small businesses for support during the Covid-19 pandemic, we helped get more than \$30 billion in loans processed.
- Lead the development of multiple Scala based Spark jobs that do analytics and create KPI reports from our primary application.
- Improved the scalability of our application as the number of customers grew over 55 million, ensuring our highly distributed system did not have an increase in latency as our customer size grew.
- Created solutions that maintained our applications average response time at 250 milliseconds, as we surpassed more than 425 transactions per second.
- Assisted with software engineering recruitment efforts for the firm, as well as, helped plan and run DEI efforts.
- Selected out of an estimate of 30 participants for a weeklong professional program to better understand how to grow as leader.

Associate - Software Engineer at JPMorgan Chase & Co.

10/2017 - 02/2020

- Built a Java Spring Boot application from scratch that aggregated data from multiple Cassandra data stores to give customers financial insight into their spending and investing habits.
- Scaled the application to grow from supporting hundreds of customers to millions of customers by migrating our application onto the cloud.
- Created the proof of concept that was used as the basis to move the application into a cloud environment.

- Helped create a CI/CD pipeline for the application, which reduced our deployment time to production from a few hours to approximately 30 minutes.
- Created the first CI/CD pipeline for Spark Jobs within our division in the firm, this was used as the basis for all CI/CD Spark Job pipelines within our division.
- Taught multiple self-defense classes for internal employees.

Education

Illinois Institute of Technology Master's of Science and Bachelor's of Science Applied Mathematics Minor Computer Science

August 2017

Cornell University Mahcine Learning Certificate September 2019

Study Abroad

East China Normal University

Summer 2014

Languages

Chinese (Mandarin) - Limited Working Proficiency