# JUSTINE GEORGE

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#### SUMMARY

Master's graduate in Computer Science from UT Dallas, with 3+ years of professional experience as a Software Engineer. Developed and optimized scalable backend systems with expertise in Java, Python, Go, and TypeScript. Built RESTful APIs, microservices architectures, and full-stack applications, all with a focus on performance and security. Deployed and managed distributed systems using AWS and GCP cloud services. Eager to tackle complex challenges and contribute to impactful projects in backend or full-stack roles.

## TECHNICAL SKILLS

Languages: Java, Python, Go, TypeScript, JavaScript, SQL, GraphQL, C/C++, Bash

Frameworks & Libraries: Spring, gRPC, WebRTC, Kafka, Flask, Express, Selenium, Mockito

Databases & Data Stores: PostgreSQL, Oracle, Cassandra, Redis, MongoDB, DynamoDB, NoSQL

Cloud & DevOps: Docker, Kubernetes, Jenkins, AWS, GCP, Terraform, CloudFormation, Jira

Frontend Technologies: React, Next.js, Redux, Jest, Playwright, Tailwind CSS, Bootstrap, HTML

### **EXPERIENCE**

Software Engineer Grad Intern, Backend – Resi Media (Allen, TX)

May 2023 - Aug 2023

- Developed scalable RESTful API endpoints using Spring Boot for a prominent charity, serving over 5,000 global partners and processing over a million metadata requests monthly.
- Reduced anomaly response time by 40% through the implementation of a Terraform-automated GCP alert system, integrated with Slack and monitored by New Relic, handling over 1,000 weekly video uploads.
- Designed and implemented an FFmpeg-based feature in the Content Library to efficiently extract M4A audio from MPEG-DASH streams, enabling single-click audio downloads for users, improving accessibility and user experience.
- Tech Stack: Java, Spring, Docker, GCP, Terraform, Cassandra, Redis, New Relic, TestNG, FFmpeg, DASH

Software Development Engineer, Full-Stack (80% Backend) – Oracle (Bangalore, India) Aug 2019 – Jul 2022

- Engineered over 30 RESTful API endpoints using Spring Boot and Spring Batch for Oracle's core banking platform, optimizing operations for over 900 global banks.
- Achieved 95% faster creation of Flyway SQL migration scripts for a key banking project by developing a Python CLI tool, which was adopted by multiple teams across the organization.
- Improved page load times by 60% by developing responsive UI components using JavaScript for a React-based SPA, achieving marked gains in FCP and TTI performance metrics over the original Knockout.js architecture.
- Optimized app architecture by simplifying data fetching processes and removing 50 redundant wrapper components, leading to a 40% reduction in Docker image size and faster build times.
- Conducted over 350 code reviews and collaborated with cross-functional teams to enhance code reliability and product functionality, resulting in a 20% reduction in technical debt.
- Tech Stack: Java, Spring, Python, Docker, SQL, Oracle, Redis, JUnit, Mockito, Selenium, React, JavaScript

## **PROJECTS**

Nexus - Decentralized Messaging Service Go, WebRTC, Docker, gRPC, Kubernetes, TLS

Jul 2024

- Engineered a decentralized messaging service using Go and WebRTC for peer-to-peer communication, secured with end-to-end encryption via TLS, eliminating the need for centralized servers.
- Deployed a distributed directory service with gRPC on Kubernetes, enabling efficient peer discovery and managing peer churn, while ensuring scalable and resilient system performance. (GitHub Repo)

Book Fellow - Social Media Web App Java, Spring, PostgreSQL, Next.js, AWS (EC2, S3, SNS, Lambda) Mar 2024

- Utilized AWS Lambda triggered by SNS notifications for event-driven processing, enhancing scalability and operational efficiency by handling user activity tracking, automated moderation, and notification handling.
- Developed secure authentication and role-based access control (RBAC) using Spring Security and OAuth2, ensuring proper access control and data protection. (GitHub Repo)

Tab Keeper (Featured Chrome Extension) TypeScript, React, Redux, Cloud Firestore, Emotion CSS, Vitest Jul 2023

• Achieved 3,000 installs and 1,600 weekly active users by developing the extension with React and enabling sync across Chrome desktop browsers with Cloud Firestore. (GitHub Repo)

## **EDUCATION**

Master of Science (M.S.) in Computer Science

Aug 2022 - May 2024

The University of Texas at Dallas (UTD), Richardson, TX

3.72 GPA

Courses: Algorithms & Data Structures, Distributed Systems, Operating Systems, Database Design, Information Security

Bachelor of Technology (B.Tech.)

Jul 2015 - May 2019

National Institute of Technology Calicut (NITC), India

Courses: Data Structures, Computer Networks, Intelligent Systems Design, Object-Oriented Programming