Rayan Crasta - Software Engineer

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Summary

Dynamic software engineer proficient in system design, software development, and database management. Eager to apply technical expertise to develop high-performance applications using modern technologies, delivering top-quality solutions, and driving innovation in collaborative team environments. Committed to following best practices and enhancing software quality. Seeking roles to grow professionally and contribute meaningfully to the tech industry.

Work Experience

Mint People - Front of House Staff & Kitchen Porter (Part Time)

May 2024 - Aug 2024, UK

- Provided exceptional customer service in restaurants and clubs, handling reservations, seating, and resolving inquiries with a focus on user satisfaction.
- Supported kitchen operations through dishwashing, food prep, and maintaining cleanliness, demonstrating teamwork and reliability.

Hap Solutions - Festival and Bar Staff (Part Time)

June 2024 – Aug 2024, UK

• Delivered excellent customer service at festivals and events, managed bar operations, and ensured a positive experience for attendees.

Royal Mail – Warehouse Operative (Part Time)

Nov 2023 – Dec 2023, Northampton, UK

 Loaded/unloaded shipments and sorted items efficiently to optimize workflow, contributing to operational efficiency.

Tata Consultancy Services – Assistant Systems Engineer (Full Time)

June 2021 - Aug 2023, Mumbai, India

- Developed bash scripts to automate the hardening process of over 100+ Linux servers for compliance based on CIS benchmarks, saving 900+ hours of manual compliance effort. Awarded "Best Team" for this initiative.
- Conducted security analysis on Angular and Spring Boot codebases using Checkmarx and Fortify WebInspect, identifying and mitigating critical vulnerabilities to enhance application security.
- Integrated third-party antimalware and data tokenization solutions into existing architecture, improving overall system security.
- Conducted manual web application security testing using OWASP ZAP and Burpsuite, identifying and addressing vulnerabilities, thus enhancing application security.

Qustac Technologies Pvt. Ltd - Android Development Intern (Part Time)

Mar 2020 – Jan 2021, Mumbai, India

- Developed an Android application using Android Studio and Java, integrating TensorFlow Lite for real-time classification of explicit and non-explicit images on Android devices, showcasing innovation in mobile technology.
- Integrated a streamlined machine learning model to facilitate automatic actions upon detecting

Projects

TweetOps: Twitter-like Tweet Ingestion and Search Backend Blog | GitHub

- Developed a Twitter-like backend prototype using Go, FastAPI, Kafka, PostgreSQL, and Elasticsearch, demonstrating proficiency in full-stack development.
- Managed a dataset of 500K tweets, categorized by language, and ingested into Elasticsearch via Kafka for efficient data handling.
- Utilized Elasticsearch for real-time tweet search and immediate availability of ingested tweets, enhancing user experience.
- Created user and tweet search functionalities with PostgreSQL and Elasticsearch, including pagination for better performance.
- Developed a FastAPI service for flagging profane tweets based on a model, integrated into the ingestion process for safe search.

MyShowSeat: Booking Service Backend Blog | GitHub

- Developed a booking service backend prototype using Go, Redis, and PostgreSQL, ensuring a seamless user experience during high traffic.
- Implemented booking logic for seat checks, claiming, payment verification, and finalization, demonstrating strong problem-solving skills.
- Utilized Go's concurrency for asynchronous processing, maintaining data integrity with PostgreSQL transactional operations and row-level locking.
- Enhanced performance with Redis caching for seat availability, reducing database calls and improving scalability. Incorporated JWT token-based authentication for secure service access.

Debate Management System (Dissertation Project)

- Designed a platform for managing structured debates in academic settings, incorporating gamification, guizzes, and real-time feedback.
- Built using React.js for responsive UIs and FastAPI for backend logic, with PostgreSQL for authentication and MongoDB for debate storage.
- Utilized Redis for real-time tracking and WebSockets for live updates during debate sessions, enhancing functionality.
- Provided detailed post-debate analytics to help educators enhance teaching strategies.

Education

University of Leicester

MSc Cloud Computing (Sept 2023 - 2024)

Mumbai University

Bachelor of Engineering, Information Technology (2021), 9.42 CGPA

Skills

- Languages: Go, Python, Java, JavaScript, Typescript, FastAPI, Django, ReactJS
- Databases: PostgreSQL, MongoDB, Redis
- Infra: Linux, Docker, AWS
- Tools: Kafka, Elasticsearch, Jenkins, Prometheus, Grafana
- Security: Burpsuite, Checkmarx, WebInspect, OWASP ZAP
- **Soft Skills**: Strong communication, teamwork, problem-solving, adaptability, and attention to detail