Rayan Crasta - Software Engineer

Email: rayancrasta95@gmail.com | **Contact**: +44 7767591427
Location: Leeds, UK | LinkedIn | http://rayancrasta.com | GitHub

Summary

Dynamic software engineer with a solid foundation in system design, software development, and database management. Eager to leverage technical skills in Python, Go, and backend technologies to build high-performance applications and drive innovation in collaborative environments. Seeking challenging opportunities in fintech to contribute to the development of robust systems for managing digital assets and trading analytics.

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.
- Supported kitchen operations through dishwashing, food prep, and maintaining cleanliness.

Hap Solutions - Festival and Bar Staff (Part Time)
June 2024 – Aug 2024, UK

- Delivered excellent customer service at festivals and events, efficiently managing bar operations and customer interactions.

Royal Mail – Warehouse Operative (Part Time)
Nov 2023 – Dec 2023, Northampton, UK

- Loaded/unloaded shipments and sorted items efficiently to optimize workflow, ensuring timely distribution.

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 hours. Won "Best Team" award for this initiative.
- Conducted security analysis on Angular and Spring Boot codebases using Checkmarx and Fortify WebInspect, identifying and mitigating critical vulnerabilities, contributing to enhanced system integrity.
- Integrated third-party antimalware and data tokenization solutions into existing architectures, improving data security and compliance.
- Conducted manual web application security testing using OWASP ZAP and Burpsuite, identifying vulnerabilities and reinforcing application security protocols.

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.
- Streamlined machine learning models for automated actions upon detecting explicit content, enhancing user safety.

Projects

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

- Engineered a Twitter-like backend prototype using Go, FastAPI, Kafka, PostgreSQL, and Elasticsearch, focusing on high-throughput data ingestion and real-time search capabilities.
- Managed a dataset of 500K tweets, ensuring efficient ingestion and retrieval through optimized Elasticsearch queries.
- Developed functionalities for user and tweet searches with pagination, enhancing user experience and data accessibility.
- Created a FastAPI service for flagging profane tweets based on a model, ensuring safe search operations.

MyShowSeat: Booking Service Backend Blog | GitHub

- Developed a booking service backend using Go, Redis, and PostgreSQL, enhancing performance and user experience during peak traffic.
- Implemented robust booking logic with transactional operations and row-level locking to maintain data integrity.
- Leveraged Redis caching for seat availability, significantly reducing database load and improving response times. Incorporated JWT token-based authentication for secure access.

Debate Management System (Dissertation Project)

- Designed a platform for managing structured debates in academic settings, incorporating gamification, quizzes, and real-time feedback for enhanced engagement.
- Built using React.js for responsive UIs and FastAPI for backend logic, with PostgreSQL for user authentication and MongoDB for debate storage.
- Utilized Redis for real-time tracking and WebSockets for live updates during debate sessions, ensuring seamless interaction.
- Provided analytics post-debate to aid educators in enhancing teaching strategies through data-driven insights.

Education

University of Leicester
MSc Cloud Computing (Sept 2023 - 2024)

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

Skills

- **Languages**: Python, Go, FastAPI, Django, Bash, JavaScript, Java, ReactJS
- **Databases**: PostgreSQL, MongoDB, Redis
- **Infrastructure**: Linux, Docker
- **Tools**: Kafka, Elasticsearch, Prometheus, Grafana
- **Security**: Burpsuite, Checkmarx, WebInspect, OWASP ZAP
- **Soft Skills**: Strong problem-solving abilities, effective communication, team collaboration, adaptability, and a proactive approach to learning and development.