# **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 software development principles and experience in system design, database management, and security analysis. Proficient in Python and Java, with a keen interest in developing scalable, high-quality software solutions. Eager to leverage technical expertise and strong problem-solving skills to contribute to innovative projects in a collaborative team environment. Seeking opportunities to grow professionally and make a meaningful impact in 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 client satisfaction.
- Supported kitchen operations through dishwashing, food prep, and maintaining cleanliness, demonstrating teamwork and adaptability.

**Hap Solutions** - Festival and Bar Staff (Part Time)

June 2024 – Aug 2024, UK

• Delivered excellent customer service at festivals and events while managing bar operations, showcasing strong communication and interpersonal skills.

**Royal Mail** – Warehouse Operative (Part Time)

Nov 2023 - Dec 2023, Northampton, UK

 Loaded/unloaded shipments and sorted items efficiently, optimizing workflow and demonstrating attention to detail.

**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.
  Recognized with the "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, enhancing application security.
- Integrated third-party antimalware and data tokenization solutions into existing architecture, demonstrating the ability to work with diverse technologies.
- Conducted manual web application security testing using OWASP ZAP and Burpsuite, identifying and addressing critical vulnerabilities.

**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 model integration 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.
- Managed a dataset of 500K tweets, categorized by language, and ingested into Elasticsearch via Kafka.
- Utilized Elasticsearch for real-time tweet search and immediate availability of ingested tweets, showcasing problem-solving and analytical skills.
- Created user and tweet search functionalities with PostgreSQL and Elasticsearch, including pagination.
- Developed a FastAPI service for flagging profane tweets based on a model, ensuring safe search functionality.

### MyShowSeat: Booking Service Backend Blog | GitHub

- Developed a booking service backend prototype using Go, Redis, and PostgreSQL.
- Implemented booking logic for seat checks, claiming, payment verification, and finalization, ensuring a seamless user experience during high traffic.
- 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, quizzes, 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.
- 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, FastAPI, Django, Bash, JavaScript, ReactJS
- Databases: PostgreSQL, MongoDB, Redis
- Infra: Linux, Docker
- Tools: Kafka, Elasticsearch, Prometheus, Grafana
- Security: Burpsuite, Checkmarx, WebInspect, OWASP ZAP
- Soft Skills: Strong communication, teamwork, problem-solving, adaptability, and a curiositydriven mindset.