Syed Abubaker Ahmed

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DOB - 25/06/2003 | Citizenship – India | Iqama – Transferable | Driving License - Available

PROFESSIONAL SUMMARY

A dedicated Computer Science engineer focused on backend development with hands-on experience in building scalable applications and REST APIs. I am skilled in Java and Python and backend frameworks and I can build reliable and efficient data driven systems. I learn fast, solve problems with clarity and consistently deliver high quality backend solutions.

EXPERIENCE

Backend Support Engineer   **Apr 2025 – Present**
MINE   *Remote / USA*

MINE is a tech initiative building a full-stack web platform to support the Muslim Intellectual Network's digital ecosystem.

Reporting to: Head Full Stack Developer

Key Responsibilities:

- Design and tested 13+ Spring Boot REST APIs across multiple service endpoints with a strong focus on request validation response consistency error handling and smooth integration within the platform's full-stack architecture. This work ensures reliable backend behavior during active development and internal testing phases.
- Debug and resolve 9+ recurring backend and API issues by closely analyzing application logs stack traces and failed API responses. These fixes address integration flaws data handling inconsistencies and stability problems that directly affect system reliability.
- Collaborate closely with frontend developers to support backend and frontend integration and feature delivery. This includes refining API contracts aligning request and response structures and resolving data flow issues to ensure seamless communication between application layers.
- Built and implemented automated API testing scripts to reduce manual testing effort and improve testing consistency across services. These scripts support regression testing validate API behavior after changes and help detect backend issues earlier in the development cycle.
- Maintain clear and structured backend documentation that details API endpoints request parameters response formats and known behaviors. This documentation supports efficient development workflows improves cross team understanding and enables faster onboarding for contributors.
- Consistently complete assigned backend tasks within expected timelines while working part-time and adapting quickly to changing development requirements.

Key Achievements:

- Strengthened backend stability by improving API behavior and response handling which resulted in a measurable increase in response reliability during internal testing.
- Reduced recurring backend failures through consistent debugging and targeted fixes which improved overall system reliability and lowered repeated error occurrences.
- Enhanced team productivity by delivering dependable backend contributions and maintaining well organized technical documentation that supported smoother collaboration and development progress.

EDUCATION

VIT Vellore (Vellore Institute of Technology)   **2021 – 2025**
Bachelor of Technology in Computer Science and Engineering   *Vellore, India*

PROJECTS

MSME E-Commerce Platform| *Spring Boot, Postman, PostgreSQL*   **Jul 2024 – Dec 2025**
- Designed and implemented the backend architecture for buyer and seller workflows with clear service separation and scalable data flow.
- Built REST APIs for users' products bookings and reviews and implemented inventory handling and booking logic to ensure accurate availability and conflict free reservations.
- Integrated PostgreSQL for product and shop data management and validated backend functionality through systematic API testing using Postman.

Vehicle Trajectory Prediction| *Python, Scikit-Learn, PyTorch*   **Feb 2025 – Apr 2025**
- Implemented backend data processing pipelines to support short term vehicle movement prediction. Exposing model outputs through backend services and achieving an ADE of 1.99 m and FDE of 4.43 m on the Argoverse validation set.
- Fine tuned dataset consistency by preprocessing trajectories, reducing noise, and restructuring inputs, outperforming baseline CV (ADE 3.55m) and LSTM-ED (ADE 2.27m) models.
- Enabled faster inference by optimizing the prediction model for lightweight execution in assistance scenarios while maintaining accuracy competitive with Social-LSTM (ADE 1.80m, FDE 3.89m).

Crash Detection System| *YOLOv8, CNN, OpenCV*   **Apr 2025 – Jun 2025**
- Built and managed a backend-driven accident detection pipeline that combined model inference with custom dataset construction, achieving 97.5% accuracy, 98.5% precision and 96.6% recall through reliable data ingestion validation and processing workflows.
- Designed backend validation logic using multi frame crash confirmation and confidence-state handling to improve detection reliability, reducing false positives to 1.5% while sustaining ~0.87 ms/frame inference latency at the service level.
- Implemented cloud based backend integrations to handle confirmed crash events by uploading incident images and triggering automated WhatsApp SMS and call alerts via external APIs, strengthening real-time emergency responsiveness.

TECHNICAL SKILLS

Languages: Java, Python, SQL, C/C++
Backend Frameworks: Spring Boot, Node.js, Express.js
Data and ML Integration: TensorFlow/Keras, YOLOv8, OpenCV, aioquic
Developer Tools: Postman, Git, Docker, VS Code, IntelliJ IDEA
Platforms: AWS, GCP