# Mohammed Maaz

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## CAREER OBJECTIVE

Motivated Computer Science student with hands-on experience in full-stack development, AI/ML applications, and modern web technologies. Seeking to contribute technical expertise in software development roles, where I can apply my proficiency in MERN stack, deep learning frameworks, and API integrations to build scalable solutions. Passionate about leveraging emerging technologies to solve complex problems and drive innovation in dynamic software development environments.

## SKILLS

**Technical Skills**

- **Programming Languages:** Python, Java, JavaScript
- **Frameworks & Libraries:** TensorFlow, Keras, PyTorch, OpenCV, NLTK, Selenium, Node.js, Express.js, React.js
- **AI/ML & Deep Learning:** 3D CNNs, Transfer Learning, NLP, Computer Vision, Generative AI, LangChain
- **Tools & Technologies:** Git, GitHub, VS Code, Jupyter, HTML, CSS, Postman (API Testing)
- **Databases:** MySQL, MongoDB
- **Data Structures & Algorithms:** Java, Python

**Soft Skills**

- Analytical problem-solving, teamwork, adaptability, and time management

## EDUCATION

- **B.Tech in Computer Science Engineering (AIML)** *2022–Present (Expected 2026)*
  REVA University, Bengaluru **CGPA: 9.35**
- **XII (2nd PUC)** *2022*
  Presidency PU College, Bengaluru **93.33%**
- **X (SSLC)** *2020*
  The Best High School, Bengaluru **93.92%**

## PROJECTS

### Road Rage Detection using Deep Learning and Computer Vision *Dec 2024*

**Technologies: Python, TensorFlow/Keras, OpenCV, 3D CNN, Transfer Learning**

- Developed a real-time road rage detection system using 3D CNNs with 5-frame temporal smoothing, achieving 94% accuracy on a custom Indian dataset.
- Reduced false positives by 15% through transfer learning, optimized for Bangalore traffic conditions.
- Deployed for traffic monitoring and insurance claim verification, scalable for multi-class aggression detection.

### AI-powered LinkedIn Automation Tool *May 2025*

**Technologies: Python, Selenium, Gemini API, NLP, HTML Parsing, Tkinter**

- Developed a Tkinter-based automation system for LinkedIn that enables personalized connection requests, messaging, and auto-posting with a user-friendly interface.
- Employs Gemini-powered NLP for intelligent, context-aware messaging and hashtag generation.
- Incorporates dynamic scrolling, human-like interaction delays, and profile-based targeting to ensure compliance and improve engagement.
- Features a modular, real-time execution system to streamline user workflows and facilitate future extensions like resume assistance, and alumni messaging.

### Intelligent Policy Document Query System (HackRx 2025) *Aug 2025*

**Technologies: Python, FastAPI, FAISS, Azure Document Intelligence, PyPDF2, Sentence Transformers, Gemini API**

- Built a state-of-the-art intelligent query system for the HackRx competition, enabling accurate extraction and analysis of insurance policy documents (16+ pages).
- Implemented a hybrid document processing pipeline with PyPDF2 primary extraction and Azure OCR backup, improving coverage from 12.5% to 100%.
- Integrated FAISS vector search with Cross-Encoder reranking, achieving 60% better context relevance for policy specific queries.

- Developed a secure FastAPI backend with Bearer token authentication, async processing, and scalable architecture for production deployment.

**Amazon Review Sentiment Analyzer** *Apr 2025*

**Technologies: Python, Streamlit, Scikit-learn, NLTK, TF-IDF, Random Forest**

- Built a Streamlit-based sentiment analysis tool for Amazon reviews using TF-IDF and Random Forest.
- Implemented NLTK preprocessing (tokenization, stop words, lemmatization) for accurate real-time prediction.

**Audit Lens** *Under Development*

**Technologies: Next.js, FastAPI, Python, TypeScript, Tailwind CSS, Google Gemini AI, scikit-learn, OpenCV**

- Developing a full-stack intelligent auditing system for invoice processing and fraud detection.
- Integrates AI-powered OCR (using Tesseract + Gemini 2.0 Flash) for multi-language document parsing (English, Spanish, French).
- Implements ML-based fraud detection using statistical anomaly detection, duplicate checks, and vendor risk scoring.
- Designed a Next.js dashboard with sorting, filtering, and analytics for real-time monitoring.
- Focused on security through API key management, input validation, and restricted CORS policies.

**Wanderlust – Hotel/Accommodation Booking Platform (Airbnb Clone)** *Under Development*

**Technologies: MERN Stack, Mapbox API, Cloudinary, JWT Authentication**

- Developing a full-stack accommodation booking system where users can register, log in, and browse available hotels.
- Implemented authentication (login/logout) using JWT and integrated Cloudinary for image management.
- Displaying hotel listings with details and images, along with interactive maps using Mapbox API.
- Currently extending features for location-based search, booking workflow, and host-side management.

## PUBLICATIONS

"Road Rage Detection System using Deep Learning and Computer Vision." *IEEE International Conference on Intelligent Computing and Control Systems (ICICACS), 2025.*
Published in IEEE Xplore: https://ieeexplore.ieee.org/document/10968328

## CERTIFICATIONS

**Data Structures and Algorithms using Java** *NPTEL, Jul–Oct 2024*
Completed a 12-week course (score: 72%) covering arrays, trees, graphs, and algorithmic problem-solving.

**Kubernetes & Docker Fundamentals** *Udemy, Ongoing*
4-hour course on Docker basics, Kubernetes orchestration, and hands-on labs.

**SQL using MySQL and DB Design** *Scaler, Apr 2024*
Covered SQL queries, joins, subqueries, aggregation, and schema design.

**MongoDB Developer Course** *Infosys Springboard, Dec 2024*
Learned CRUD, indexing, aggregation, and NoSQL data modeling.

**Full Stack Web Development (Sigma 5.0)** *Apna College, Ongoing*
Pursuing in-depth training in the MERN stack (MongoDB, Express, React, Node.js) and data structures using Java, covering frontend development, backend APIs, database integration, and algorithmic problem-solving.

## INTERESTS

- Strategic Performer: Passionate about activities like cricket and gaming that enhance teamwork, discipline, and real-time decision-making under pressure.
- Creative Problem-Solver: Apply innovative approaches to both personal and professional challenges, often leveraging AI tools to streamline tasks and enhance efficiency.
- AI-Driven Innovator: Enthusiastic about harnessing AI technologies to build intelligent systems that automate processes, improve productivity, and solve real-world problems.