Syed Muhammad Ammar

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EDUCATION

NED University of Engineering and Technology

Bachelor of Engineering in Software Engineering

Nov 2021 – Jun 2025 karachi, Pakistan

PROFESSIONAL EXPERIENCE

MatchMaker GME

Apr 2024 – Present

Software Engineer

New York, USA(Remote)

- Developed several full-stack web and mobile applications for education and academic evaluation.
- Implemented AI systems using LLMs for automated text analysis and content generation.
- Handled authentication, database design, and deployment of back-end and front-end services.
- Optimized database designs to cut data fetching costs by up to 25%.
- Automated processing of ~40k items by developing an ETL pipeline, structuring data and populating Db.
- Handled app publishing on Google and Apple stores, ensuring compliance with platform guidelines.
- Oversaw full product lifecycles while mentoring two developers and coordinating with stakeholders.

• MetaTalent.ai Jan 2024 – Apr 2024

Software Engineering Intern

London, UK (Remote)

- Built ~20-screen admin panel with 3 custom dashboards, enabling full platform and user management.
- Developed several skill assessment features, implementing both front-end and back-end functionality.
- $_{\circ}$ Designed RESTful APIs and optimized DB schemas for efficient data communication and management.

Evincible Solutions

Aug 2023 – Sep 2023

Karachi, Pakistan

Software Engineering Intern

- Built an app and several interfaces using power apps and power pages, for smooth property assessments.
- Designed a chatbot for a hotel booking system using Power Virtual Agents, automating reservations.
- Automated business workflows and developed custom components, improving organizational efficiency.

ACHIEVEMENTS AND AWARDS

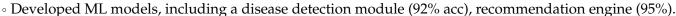
- Code in Place'25 (Stanford University) Selected as Section Leader, taught programming to international students. [Link]
- GreenCrop.ai (AgriSense) recognized among the Best Projects of 2025 by the UNESCO Chair at NED University. [Link]
- Presented my work **GreenCrop.ai** at the **Climatech International Conference**, *Karachi*, *Pakistan* (*January* 2025). [Slides]
- 1st Place, IBA HackFest 2025 led the winning team in a Shark Tank–style innovation competition. [Link]
- Runner-up, IEEE YESIST12 Regional Finals presented GreenCrop.ai among top university teams from across the state in a highly competitive innovation challenge. [Link]
- Runner-up, CodeSphere'23 among 100+ participants in a departmental programming contest. [Link]

SKILLS

- **Programming Languages:** Python, JavaScript, C++
- AI & Machine Learning: LangChain, RAG, Fine-tuning, Agentic AI, Tensorflow/PyTorch(familiar)
- Frameworks: React, React Native, Next.js, Node.js, Express.js, NestJS
- Database Systems: PostgreSQL, MySQL, MongoDb, Firebase, VectorDB
- Tools: GitHub, Figma, Postman, UML, Latex

• GreenCrop.ai(AgriSense): AIoT-Enabled Smart Farming System

Technologies: React Native, TensorFlow, LangChain, NestJS, FastAPI, PostgreSQL, LLMs, ESP32, Azure, Hugging face



- Created a decision-support system using generative AI with RAG for localized, context-aware insights.
- Architected an IoT device, integrating sensors, microcontrollers, and solar power for soil monitoring.
- Integrated voice-based AI models to enhance accessibility, expanding usability to millions of farmers.
- Designed 15+ screens, 12+ APIs, and deployed services across Azure and Render for smooth integration.
- Led a 4-person team, managing the product lifecycle and marketing the product by pitching at 5+ events.

• ResearchRank: AI-Powered Student Ranking System

Technologies: ReactJs, JavaScript, OpenAI API, GitHub, Firebase, Vercel

- Built a ranking system using publication metrics, personal statement, and recommendations.
- Integrated LLM for automated evaluation, with customizable scoring criteria and weightages.
- Engineered authentication, db schemas, and report generation for streamlined data handling.

• ScrubHub: Medical Education App

Technologies: React Native, Firebase, Next.js, Netlify, Tailwind CSS, LLMs



- Developed/deployed cross-platform app with personalized learning, and social collaboration features.
- Integrated LLMs to auto-generate 18,000+ questions and architected scalable db schemas.
- Managed product strategy and development, conducting feature research, evaluating technical trade-offs, and designing scalable data and UX structures aligned with user needs.

GoatLang: A Programming Language

Technologies: JavaScript, React, Node.js, Express.js, Babel, GitHub, Trello, Vercel



- Developed a compiler to tokenize code, create an abstract syntax tree, evaluate and display output.
- Built a web-based ide for coding, and learning GoatLang with built-in resources.
- \circ Created an AST visualizer to view how Goat Lang processes code, providing insights into the AST.
- Applied data structures and object-oriented principles to design parsing and language components.
- o Contributed to docs, i.e., proposals, requirement specifications, UML diagrams, and project reports.

VOLUNTEER & LEADERSHIP

CODE IN PLACE 2025, Stanford University

Apr 2025 - Jun 2025

Section Lead

• Instructed virtual classes for a cohort of 10–15 students in CS106A: Introductory Python Programming.

· Google Developer Group on Campus

Oct 2023 - Jun 2025

Partnership Team Lead

- Recruited members, prepared proposals and established partnerships with companies and to fund events.
- Organized workshops and tech events for 300+ students, managing promotions and boosting attendance.

PUBLICATIONS

- [1] GreenCrop.ai: Smart Solution for Precision Farming, and Resource Efficiency S. Zardari, S. M. Ammar, M. Osama, S. Sahil, H. Shahid, M. Ullah *SoftwareX*, 2025 (*under revision*).
- [2] AI-Generated Code: Security Risks vs. Productivity Gains A Systematic Review S. Zardari, M. Osama, **S. M. Ammar**, A. Siddiqui, M. Gupta, A. Nanthaamornphong *Manuscript in preparation*.

COURSES AND CERTIFICATIONS

- Coursera(Stanford.ai): Machine Learning Specialization (in-progress)
- Coursera(Meta): HTML and CSS in depth, React Basics & Advanced
- Jawan Pakistan: UI/UX Designing & Front-End Web Development
- Frontend Masters: Intro to Node.js, API Design in Node.js