Saad Ali

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EDUCATION

NED University (UIT)

Bachelor of Science in Software Engineering

SKILLS

Languages & Framework: Python, JavaScript, HTML, CSS, Bash, Scala, OpenCV, Flask, SkLearn, NumPy, Pandas Tools & Software: Git, GitHub, PowerBi, Linux, AWS, Docker, Kubernetes, JupyterNotebook, N8N, Zapier

EXPERIENCE

Avennex

Al Engineer

Feb 2025 – Present | Remote (Halifax, Canada)

Expected Graduation: July 2025

- Developed an AI-integrated educational web app from scratch, including attendance, assignment uploads, and fee tracking for all subjects and class levels in one platform.
- Designed an intelligent assistant that offers hints and complete solutions for textbook-based queries, helping students understand concepts and solve problems independently at their pace.
- Implemented a Retrieval-Augmented Generation (RAG) system with OpenAl API integration to provide contextually accurate academic help based on uploaded book material and student input.
- Solved multi-page question recognition by using page headers and footers, ensuring complete question context is preserved and interpreted accurately by the backend AI system.

360 Xpert Solutions

Al Engineer Intern

July 2024 – Aug 2024 | Hybrid (Karachi, Pakistan)

- Collaborated with a development team to create a registration platform that automated participant entry and improved data accuracy for a national-level sports event.
- Built an OpenCV-based verification module in Python to match winners with registration data, improving the reliability of event result validation workflows.
- Implemented fraud detection logic into backend services, enabling automated checks that reduced manual work and enhanced transparency during winner selection and prize distribution.

Micro Electronic Research Lab

Research Intern

Sep 2022 – Dec 2023 | Hybrid (Karachi, Pakistan)

- Developed spiking neural network (SNN) models tailored for microprocessors, enabling efficient real-time learning and decision-making from continuously changing sensor-based input.
- Integrated advanced AI algorithms with RISC-V architecture to enhance execution speed, energy efficiency, and intelligent responsiveness in embedded and edge-computing environments.
- Contributed to the Vaquita open-source RISC-V core by designing vector masking techniques that improved parallel data handling and streamlined multi-threaded hardware processing workflows.

PROJECTS

Resume Rater | Solo Project

Aug 2024

- Developed a web application using the TF-IDF approach and cosine similarity to assess resume alignment with job descriptions, resulting in a 30% average improvement in match scores and a 40% increase in interview chances for over 500 job seekers.
- Provided actionable insights for resume refinement, leading to a 25% increase in interview requests and enhanced user experience.
- Project Link: <u>Resume-Rater</u>

Emotion Entertainment | Solo Project

July 2024

- Developed the EmoEnt project, a machine learning and image processing tool, analyzing user inputs like genre and language to recommend songs, resulting in a 90% accuracy rate for emotional alignment with over 1,000 users
- Facilitated more effective interpersonal interactions by providing actionable emotional insights, improving user engagement and communication awareness by 25%.
- Project Link: EmoEnt

ACTIVITIES

- Blogs: Write blogs on Medium about tech innovations; explore my work: Medium Profile.
- Contribute to opensource project on GitHub.