

SAAD NADEEM

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Aspiring Full-Stack Developer with Experience in DevOps and Cloud Technologies.

SUMMARY

Computer Science graduate with strong foundations in OOP and DSA, experienced in building full-stack web applications using the MERN stack. Led the development of **NeuroAssess**, an AI-driven platform using NLP to support neurodivergent students. Proficient in taking applications from code to cloud using DevOps workflows and scalable AWS infrastructure. Familiar with AI-assisted development and automation using tools like Cursor AI, n8n, and GenAI.

EDUCATION

FAST National University of Computer and Emerging Sciences

Sep 2021 – Jun 2025

Bachelor of Science in Computer Science

TECHNICAL SKILLS

Languages: Python, C++, JavaScript, HTML, CSS, SQL

Frameworks & Libraries: MERN Stack (MongoDB, Express.js, React.js, Node.js), FastAPI, Tailwind CSS, Material UI, Pandas

Databases: MongoDB (NoSQL), Oracle SQL (Relational)

Cloud & DevOps: Docker, GitHub Actions, Jenkins, Kubernetes, Argo CD, Helm, Terraform (IaC), AWS (EC2), CI/CD Pipelines

Developer Tools: Git, GitHub, VS Code, Eclipse, Postman, Google Colab, Cursor AI

AI Tools & Integrations: Hugging Face (Custom Vision), OpenAI Whisper, RAG, RESTful APIs, n8n, Cursor AI

PROJECTS

NeuroAssess - AI-Assisted Support for Neurodivergent Students (FYP) | MERN, CNN, Docker, Github

- Co-developed an **AI-powered MERN platform** (MongoDB Atlas, Express.js, React.js, Node.js) designed to **support neurodivergent** learners through real-time, intelligent learning assessments.
- Integrated a **custom-trained CNN handwriting recognition model** (deployed on Hugging Face) to detect signs of **dyslexia and dysgraphia**, enabling the system to auto-generate structured assessment reports.
- Designed a **role-based** access control system for admins, psychiatrists (mental health professionals), and neurodivergent learners, each with personalized dashboards for **progress tracking**, detailed insights, and targeted interventions.
- Containerized** the complete application stack (frontend, backend, and AI service) using **Docker** to ensure development consistency and portability across environments.

Full DevOps Pipeline: From Web App to Docker, CI/CD, and Kubernetes with GitOps

- Took a simple web application from local development to production by containerizing with Docker, automating with CI/CD, and deploying at scale using Kubernetes and GitOps.
- Containerized the full-stack application (frontend, backend, database) using **Docker Compose** with support for hot reloading, multi-stage builds, and environment-based configuration to streamline local and staging workflows.
- Deployed the containerized services to Kubernetes, designing a scalable, multi-service architecture with ConfigMaps, Secrets, probes, and resource quotas, and automated continuous delivery via Helm charts and Argo CD GitOps pipelines.
- Built a **CI/CD pipeline** using **GitHub Actions** to automate build, test, and Docker image deployment workflows with version control integration.

Notepad Text Editor Using Quad-Linked List Nodes | C++, Data Structures

- Built a console-based Notepad-style text editor using a custom quad-linked list data structure, enabling 4-directional navigation (next, previous, up, down) between nodes to efficiently manage multi-line text editing.
- Implemented core editing features such as insert, delete, undo, and redo using memory-optimized node manipulation for dynamic text handling.

Cricbuzz-Inspired Live Scoreboard Application | C++, Object Oriented Programming

- Developed a fully interactive console-based cricket scoreboard system applying the four pillars of OOP: Encapsulation, Abstraction, Inheritance, and Polymorphism for clean architecture and modular design.
- Modeled core entities like Teams, Players, Matches, Scoreboards using well-structured class hierarchies with dynamic behavior through virtual functions and class inheritance.

Social Media Sentiment Analysis | Python, Transformers, Apify, Seaborn

- Analyzed Facebook and Instagram comments on a fashion product using cardiffnlp/twitter-roberta-base-sentiment, identifying key sentiment drivers and visualizing trends to extract actionable customer insights.