Samad Mehndi

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Github: github.com/samad-mehndi | LinkedIn: linkedin.com/in/samad-mehndi | Portfolio

EDUCATION

University of Texas at Dallas Dallas, TX

MS Computer Engineering w/ Machine Learning | GPA - 3.934

May 2026

Key Courses: Embedded Systems, Data Structures, Algorithms, Machine Learning, NLP, Computer Architecture

Guru Gobind Singh Indraprastha University,

Delhi, India

B.Tech in Electrical and Electronics Engineering

Sep 2020

SKILLS

Languages: Python, C/C++, Java, NoSQL, SQL

Tools: MS Office, Git, Github, Jira, Jenkins, AWS, GCP, Azure, MySQL, PostgreSQL, MongoDB, Jupyter, Oracle DB, Hadoop

Web Technologies: HTML5, CSS, Javascript, Typescript, Microservices, Ruby on Rails, Django, Nodejs, Express, Spring, Flask

Libraries: Scikit-Learn, BeautifulSoup, Pandas, Matplotlib, OpenCV, Keras, Pytorch, TensorFlow, NLTK, Spacy

Others: Data Structures, Algorithms, OOPs, Linux, Multi-Threading, Machine Learning, NLP, Computer Vision, CI/CD

WORK EXPERIENCE

Software Engineer L1 - Think Future Technologies, Gurugram, India

Feb 2022 - Jun 2023

- Developed robust APIs for the project's backend, handling over 1,000 concurrent requests per second, ensuring scalability and efficiency.
- Diagnosed and resolved over 50 bugs and performance issues monthly within a 20,000+ line codebase, collaborating with cross-functional teams in Agile sprints to ensure timely feature delivery and deployment.
- Created and optimized database queries, reducing data retrieval time by 30% and improving manipulation efficiency by 25%, while also contributing to frontend development using Reactjs to support seamless full-stack feature integration.

Software Trainee - Think Future Technologies, Gurugram, India

Nov 2021 - Jan 2022

- Contributed to developing a web-based admin management dashboard for Troikaa Pharmaceuticals, focusing on: CRUD operations for user information manipulation, email sender for communication and websocket functionality for real-time notifications.
- Built a movie listing web app with login authentication, implementing full CRUD operations for managing movie entries.

Teaching Assistant - Coding Ninjas, Gurugram, India

Aug 2020 – Dec 2020

• Provided valuable assistance to students in Data Structures and Algorithms, addressing their queries and clarifying concepts in C++, and successfully resolved over 500 doubts through live chat interactions.

Research Assistant - DRDO, Delhi, India

Jun 2019 - Aug 2019

- Assisted my mentor in researching InGaN/GaN green laser structure.
- Developed an intruder alarm for the border security system using Laser technology.

PROIECT EXPERIENCE

AI-Driven Dynamic Resource Allocation for GPU Optimization

Apr 2025

- Utilizing time-series forecasting models (LSTM/ARIMA) and reinforcement learning to predict GPU demand and dynamically allocate resources across multiple competing AI models.
- Evaluating improvements in latency, GPU utilization, and cost-efficiency by comparing intelligent scheduling strategies against traditional static allocation methods in cloud hosted AI workloads.

NLP-based Mental Health Support Chatbot

Mar 2025

- A conversational assistant designed to detect user sentiment and intent using transformer-based models, offering empathetic responses and guiding users to mental health resources.
- Integrating emotion classification, mental health resource recommendations, and conversational flow management, leveraging Hugging Face transformers and real-world mental health dialogue datasets.

ECG Signal Classification using Machine Learning

Aug 2024 – Oct 2024

- Developed and optimized deep learning models using TensorFlow and Keras, leveraging CNNs and RNNs for high-accuracy ECG signal classification in biometric authentication.
- Conducted data preprocessing, feature engineering, hyperparameter tuning, and statistical analysis to validate model performance, achieving robust accuracy metrics.

Realization: A Project Management Tool

Jul 2022 - Jun 2023

- Developed APIs using Node.js and Express.js to generate performance score reports based on user, project, and task metrics, as well as to visualize task progress through block diagrams within project contexts.
- Implemented MongoDb for data storage, integrated AWS for cloud deployment, and resolved backend issues through debugging with Postman and Git.