Jumana B

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Profile

Graduate student with expertise in machine learning, data analysis, and visualization. Passionate about building AI-driven web platforms and enabling data-informed innovation.

Education

Shiv Nadar University, Chennai Sep 2022 – Present
B.Tech in Artificial Intelligence and Data Science CGPA: **8.81/10.0**

Work Experience

Artificial Intelligence Intern, *AICTE* June 2025 – July 2025

- Built an **Employee Salary Prediction System** with models achieving up to **90.14% accuracy**.
- Deployed a **Streamlit dashboard** for **single/batch predictions**, reducing manual analysis by **70%**.

Data Analyst Intern, *Outlook Publishing (India) Pvt. Ltd.* May 2025 – July 2025

- Built **Tableau dashboards** to analyze **12% of subscriptions**, revealing brand and demographic trends.
- Conducted **3-year churn forecasting**, identifying high-expiry periods for sales optimization.

Junior Web Developer Intern, *LedgerBooks* Dec 2024 – Apr 2025

- Implemented a **React** frontend and contributed to scalable **Web3** solutions for seamless crypto accounting.
- Optimized **Node.js** backends with **Cassandra** to streamline workflows and handle large-scale data.

Full Stack Developer Intern, *SportJacks* Dec 2023 – Nov 2024

- Enhanced user interfaces using **Next.js**, while developing server-side functionalities with **Node.js** and **Express**.
- Improved responsive designs to ensure usability across devices and boost application performance.

Projects

Health Diagnosis Assistant: Built MedBot, an NLP chatbot with BERT, FastText, and Word2Vec; achieved 90.62% migraine diagnosis accuracy with fine-tuned BERT.

COVID-19 Diagnosis Using Chest X-rays: Developed a CNN platform using VGG19, EfficientNetB0, and CLAHE for COVID-19 classification, attaining 89.58% accuracy in chest X-ray screening.

Predicting Problematic Internet Use in Children via Physical Fitness: Implemented sparse autoencoder and XGBoost model to estimate Severity Impairment Index, achieving QWK score of 0.538 for behavior risk.

Image Forgery Detection: Architected ELA and CNN-based solution for detecting image tampering; realized 94.05% accuracy on NLPR-CASIA to verify media authenticity.

Demand Forecasting for Inventory Management: Deployed ARIMA and LSTM models, reaching 87% demand prediction accuracy to optimize inventory and reduce stockouts.

Technical Skills

Languages	Python, Java, C, JavaScript
Data Structures	Solved **250+** problems on LeetCode
Machine Learning	NumPy, Pandas, Scikit-learn, Keras, PyTorch
Deep Learning	CNNs, RNNs, LSTMs, Transfer Learning, EfficientNet
Generative AI	Transformers, Hugging Face, GPT Models
Data Visualization	Tableau, Matplotlib, Seaborn
Web Development	HTML5, CSS, JavaScript, Node.js, React.js, Express.js
Databases	MySQL, PostgreSQL, MongoDB
Tools	Git, Postman, VS Code