Diptendu Kumar Jashu

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Skills

Technical Skills: C, C++, Python, Java, JavaScript, HTML5, CSS, Tailwind CSS, SQL, MongoDB

Frameworks/Libraries: JSON, Node.js, React, Express, Bootstrap, NumPy, Pandas, Matplotlib, TensorFlow, Keras, OpenCV

Tools: Git, GitHub, Firebase, AutoCAD, Figma, MS Office, AWS, Tableau

Experience

Data Science Analyst

Remote

May 2024 - July 2024

Insignia Consultancy Services

• Enhanced Named Entity Recognition (NER) models, improving accuracy and reducing processing time.

- Conducted advanced data annotation and NLP research, fine-tuning large language models to optimize entity recognition and accelerate project turnaround time.
- Collaborated with developers and data scientists to seamlessly integrate NLP techniques into existing workflows.

Freelancer Content Writer

Remote

Synergy Eduservices

Aug 2022 - Oct 2022

- \circ Developed targeted academic content related to company policies, directly influencing customer satisfaction scores by 15%.
- Monitored and maintained attendance records for 100+ training sessions, ensuring high-quality participant engagement.

Freelancer (Subject Matter Expert - SME)

Remote

 $Ladder\ Media$

May 2022 - July 2022

- Designed and delivered tailored solutions for the Indian and US markets, achieving a 30% increase in engagement rates.
- Collaborated with cross-functional teams to adapt content for cultural relevance, impacting 1,000+ users.

Projects

Krishi Yog App — React Native, Appwrite, i18n, FastAPI, Hugging Face, Gemini API, Expo

GitHub **∠**

- Spearheaded the development of AI-enhanced disease prediction feature for farmer mobile app, providing real-time crop health diagnostics and reducing manual inspection time by 40%, resulting in recognition as most valuable engineer.
- Led and collaborated with a 5-member team to enhance farmer engagement by 60%, implementing a user-friendly UI, multilingual support, and localized content, which streamlined disease reporting.

COVID-19 Detection Using GAN and FL — Python, TensorFlow, CNN, GAN, FL, Edge

GitHub **∠**

Cloud Computing

- Architected a blockchain framework integrating AI-driven COVID-19 detection across healthcare systems, ensuring secure sharing of 10,000+ patient records while adhering to differential privacy protocols, increasing data integrity.
- Deployed for 10,000+ patient records ensuring data privacy using Federated Learning and Differential Privacy.

Real-Time Chat Application — HTML, CSS, JS, React, Node.js, MongoDB, Socket.IO

GitHub 🗹

- Engineered a real-time chat app using the MERN stack, integrating instant messaging, authentication, and optimized Socket.IO communication.
- o Achieved latency under 100ms and seamless user experience with MongoDB for backend data management.

Education

SRM University, Andhra Pradesh — CGPA: 8.16

Oct 2022 - June 2026

B.Tech in Computer Science and Engineering with specialization in AI & ML

• Coursework: Data Structures and Algorithms, Operating System, Machine Learning, Computer Networks, Database Management System, Web Technologies, Object Oriented Programming

Jnan Chandra Ghosh Polytechnic, Kolkata — CGPA: 8.5

Aug 2019 - Aug 2022

Diploma in Mechanical Engineering

Publications & Achievement

- Research Paper (Under Review by IEEE) Developed a liver tumor detection model using quantum-inspired angle encoding and CNN to classify CT images into normal, benign, and malignant cases. Improved feature representation with sin/cos tensor encoding, achieving high accuracy. Integrated Grad-CAM for explainability and addressed class imbalance without quantum hardware dependency.
- Competitive Programming Achieved 3rd Rank in Code Combat at Infinitus, SRM AP's National Tech Fest. Solved over 500+ coding questions across platforms: LeetCode ☑ (Rating: 1700+), CodeChef ☑ (2-Star), GeeksforGeeks.
- **Hackathon** Spearheaded a winning team in a college-level hackathon, securing a spot in the Smart India Hackathon (SIH) 2024.