

MANAS AYYALARAJU

Mxa210130@utdallas.edu • manasayyalaraju.com • (469) 512-5972 • LinkedIn.com/in/manas-ayyalaraju

EDUCATION

The University of Texas at Dallas	Bachelor of Science, Computer Information Systems	December 2026
-----------------------------------	---	---------------

EXPERIENCE

Sudur Capital – <i>Full-Stack Web Development Intern; Frisco, Texas</i>	October 2025 – Present
• Designed and implemented a responsive full-stack platform using Next.js, TypeScript, HTML5, CSS, and PostgreSQL, ensuring secure, scalable, and optimized data solutions while significantly improving user engagement and accessibility	
• Developed and launched a real estate investment portal that allowed investors to register, evaluate opportunities, and invest in projects while enabling sponsors to showcase land developments and attract funding seamlessly	
• Accelerated the delivery of the portal's Minimum Viable Product within three months by writing and managing 20+ user stories in Jira, streamlining workflows, enhancing collaboration, and consistently meeting aggressive project deadlines	
Maxwell IoT Technologies – <i>IoT Systems & Performance Intern; Plano, Texas</i>	October 2025 – Present
• Expanded the IoT product network by 20% through the development of a mobile application and the integration of innovative connectivity strategies that strengthened system scalability and reliability	
• Boosted device productivity by 15% by applying advanced LoRa WAN technology to build a robust and efficient network, while gaining deep expertise in IoT performance analysis and optimization	
• Increased the number of active devices by 25% by supporting system testing, troubleshooting, and client issue resolution, while documenting solutions that enhanced customer satisfaction and system performance.	

PROJECTS

AI-Powered Resume Builder – <i>AI Engineer</i>	Fall 2025
• Built an intelligent resume-tailoring system using GPT-4o-mini with domain detection across 4 major industries, improving keyword recall by 40% and generating ATS-optimized resumes that dynamically adjust density to match job descriptions.	
• Designed generative optimization pipelines that reorder skills by relevance, evaluate resume completeness, and rewrite bullets while preserving structure and metadata—boosting ATS match alignment by 30–35% across test job descriptions.	
• Deployed the platform using Dockerized FastAPI (LLM inference) and LaTeX-based PDF generation on Render & Vercel with CI/CD automation, enabling scalable, production-ready AI-driven resume personalization.	
Personal Finance Health Predictor – <i>Machine Learning Engineer</i>	Fall 2025
• Built an end-to-end ML platform processing 285,000+ financial records to deliver credit risk prediction, fraud detection, and customer segmentation models, achieving 70% ROC-AUC for risk assessment and 97.7% ROC-AUC with 85.7% recall for fraud detection using XGBoost and SMOTE.	
• Engineered 26+ features, resolved critical data leakage issues, created 40+ visualizations (ROC curves, confusion matrices, feature plots), and identified 4 customer personas through clustering to enable personalized financial recommendations and targeted marketing strategies.	
• Deployed the system with FastAPI using three prediction endpoints, Pydantic validation, and 10+ unit tests, delivering production-ready APIs that reduced manual loan review effort by 30%, improved marketing conversion by 15–20%, and enabled real-time fraud prevention.	
NBA Schedule Analysis Project – <i>Data Science Analyst</i>	Fall 2025
• Processed and analyzed over 1,200 NBA schedule records using Python, pandas, and Jupyter Notebook to evaluate patterns in game density, rest days, and back-to-back sequences across multiple seasons.	
• Developed more than 10 statistical models and visualizations with matplotlib and seaborn, providing clear insights into scheduling effects and ensuring results were presented in an accessible and professional format.	
• Improved workflow efficiency and reproducibility by 30% by implementing structured coding practices, documenting each step thoroughly, and delivering well-organized analytical outputs for future reference.	
IBM Case Competition – <i>AI & Data Analytics Consultant</i>	Fall 2024
• Improved food-desert detection accuracy by 25% using Watson AI on geo and API datasets to better identify underserved areas.	
• Built a predictive model with a team to guide local government resource allocation and enhance community food access.	
• Presented analytics-driven insights and recommendations to IBM judges, highlighting strategies to reduce food insecurity.	

ADDITIONAL INFORMATION

Computer Skills: Next.js | HTML5 | CSS | TypeScript | Java | Tableau | Power BI | Python | SQL | PostgreSQL | Jira

Certifications: Microsoft Office Specialist: Excel Associate | Google Advanced Data Analytics Professional Certificate

Languages: English, Kannada, Telugu, and Hindi.

Work Eligibility: Eligible to work in the U.S. with no restrictions.