

Uday Puttireddi

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SUMMARY

Detail-oriented and passionate Software Engineer with hands-on experience building responsive, scalable front-end applications using TypeScript, React, and RESTful APIs. Strong foundation in software development principles, clean coding, and UI/UX design. Proven ability to collaborate cross-functionally and deliver performant user experiences, with projects focused on video content platforms, e-commerce, and AI-integrated tools.

EDUCATION

Minnesota State University

Bachelor of Science in Information Technology, Minor in Mathematics

Aug. 2021 – May 2025

Mankato, MN

EXPERIENCE

Teaching Assistant

Minnesota State University

Aug 2024 – May 2025

Mankato, MN

- Facilitated interactive sessions and study groups, simplifying complex topics like algorithms and data structures to boost student engagement and comprehension.
- Partnered with faculty to design course content, create assessments, and deliver actionable feedback that improved student academic performance.

International Enrollment Assistant

Minnesota State University

April 2022 – May 2025

Mankato, MN

- Processed 300+ international student applications by verifying documents and coordinating communication, streamlining the admissions workflow.
- Guided incoming international students through enrollment and visa procedures, improving onboarding efficiency and enhancing student satisfaction.

PROJECTS

AI Expert-in-a-Box | *Llama 3 API, Prompt Engineering, Python, Streamlit, LangChain*

- Designed and built a multi-step AI agent capable of autonomously interpreting complex user instructions, generating solutions, and refining outputs using advanced prompt engineering strategies.
- Implemented prompt chaining, few-shot learning, and self-evaluation prompts to handle tasks like codegeneration, document summarization, and custom task workflows.
- Integrated Llama 3 API with a Python backend and Streamlit UI to simulate human-level task planning and response generation in real time.

Delta Airlines Blackbox System | *UML, Jira, SQL, Draw.io, Microsoft Office Suite, QA Testing*

- Reverse-engineered Delta's booking system using black-box analysis to document technical workflows via UML (DFD, ERD).
- Authored 40+ user stories and 100+ test cases, uncovering critical defects like overbooking and payment failures.
- Led quality assurance efforts and defect analysis, improving system reliability and user experience.

Visualizing Netflix Data | *Amazon QuickSight, AWS S3, AWS Glue, Data Modeling, BI Tools*

- Built interactive dashboards in Amazon QuickSight to visualize global Netflix content trends and user engagement metrics.
- Engineered ETL pipelines using AWS S3 and AWS Glue, optimizing large dataset ingestion and reducing transformation time.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, SQL, R, Java, C/C++, MATLAB, HTML/CSS

Tools & Frameworks: React, AWS (S3, Glue, QuickSight), Git, Linux, Jira, Microsoft Suite

Concepts: Component-based architecture, state management, API integration, responsive design, cloud deployment

AI & Cloud: Prompt Engineering (DeepLearning.AI), AWS, Azure, Data Visualization, ETL Pipelines

Soft Skills: Creative problem solving, cross-functional collaboration, technical writing, experimentation

CERTIFICATIONS & LEADERSHIP

Prompt Engineering for Developers | *DeepLearning.AI & OpenAI*

Nov 2024

LangChain for LLM Application Development | *DeepLearning.AI*

June 2025

Student Association of India | *Secretary*

Jan 2021 – May 2023

Member of IEEE | *Nominated Attendee at 2023 IEEE Rising Stars Conference in Las Vegas*

Jan 2023