VISHAL KODAM

Utica, New York 13502

Post Graduate Computer Science Student specializing in machine learning, advanced algorithms, and optimization strategies. Proficient in data-driven solutions, quantitative analysis, software engineering, and hands-on experience in web applications and scripting.

Education

State University of New York Polytechnic Institute

Master of Science in Computer Science

Jan. 2023 – Jan 2025

Marcy, New York

Indian Institute of Information Technology, Nagpur

Bachelor of Science in Electronics and Communication

June. 2018 - May 2022

Nagpur, Maharashtra

Experience

SUNY Poly College of Health Sciences

February 2024 – Current

Graduate Research Assistant

Marcy, NewYork

- Analyzed 1,000+ EEG signals from 120 sensors using EEGLAB, applying signal processing and statistical learning to improve behavior outcome interpretations by 15%.
- Generated high-quality case study images with Stable Diffusion, using VAEs for enhanced image refinement and analysis in psychological research.

JUSPAY TECHNOLOGIES

June 2021 – November 2021

Technical Product Analyst Backend Intern

Bangalore, India

- Integrated APIs using Haskell and developed RESTful services to optimize workflows and enhance interoperability for the Government 'Sahay App'.
- Developed frontend enhancements for Presto, including auto-capitalization, real-time validation, and dynamic feedback, streamlining user input and engagement.
- Enhanced UI design, increasing user engagement and reducing error rates by 25%.
- Contributed to back-end customization in R and developed dashboards, improving data logging and analysis.

Kyoto Wave Culture - Freelance

September 2021 - November 2022

Front End Developer

Hyderabad, Telangana

- Developed and launched an e-commerce site with PayU and Razorpay integration for seamless transactions, and optimized UI to boost engagement by 40%.
- Led creative direction for Harajuku-inspired clothing designs and managed social media platforms to drive sales.

Projects/Publications

Covid-19 Detection from X-ray Scans using Alexa | Python, CNN, NLP

• Developed a CNN model on Chest X-ray images integrating NLP to implement a virtual assistant skill set for an interactive interface. Published research paper by the IEEE (link). Utilized Python modules such as pyttsx3, gTTS, and urllibMethodology for implementation.

JIRA ChatBot | Python, LangChain, Streamlit, JIRA API

• Developed an AI-powered chatbot that integrates JIRA, LangChain, and NLP to streamline Agile task management through natural language commands, automating workflows with the JIRA API and providing a user-friendly Streamlit-based interface to enhance productivity and simplify usage for non-technical users.

AI-Driven Inventory Query System | Python, Streamlit, MySQL, Google Generative AI

• Developed a natural language processing tool using LangChain and Google Generative AI to generate SQL queries from user inputs. Integrated MySQL for data retrieval, enabling non-technical users to query inventory databases with ease. Utilized few-shot learning and vector embeddings for accurate query matching and execution.

Technical Skills

Languages: Python, Java, C, PureScript, Haskell, R, MATLAB, SQL

Developer Tools: VS Code, PyCharm, Postman, Bitbucket, Jira, Android Studio, NodeJS, ReactJS, Django

DevOps/Cloud: AWS (S3, Lambdas), Git, Unix, Ubuntu, Apache ML/AI: OpenCV, Neural Networks, Tensorflow, Pytorch, Flutter

CERTIFICATIONS

- Oracle Autonomous Database Cloud 2021 Certified Specialist
- Stanford Online Machine Learning Specialization