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, and hands-on experience in web services and scripting.

Education

State University of New York Polytechnic Institute

Jan. 2023 - Jan 2025 Marcy, New York

Master of Science in Computer Science

Indian Institute of Information Technology, Nagpur

June. 2018 - May 2022

Bachelor of Science in Electronics and Communication

Nagpur, Maharashtra

Experience

SUNY Poly College of Health Sciences

February 2024 - June 2024

Graduate Research Assistant

Marcy, NewYork

 Analyzed over 1,000 high-density EEG signals from 120 EEG sensors using EEGLAB for SUNY Polytechnic Health Department. Derived insights leading to a 15% improvement in Psychological behavior research outcomes.

JUSPAY TECHNOLOGIES

June 2021 – November 2021

Technical Product Analyst Intern

Bangalore, India

- Integrated APIs using Haskell and developed RESTful services to optimize workflows and enhance interoperability for the Government 'Sahay App'.
- Developed auto-capitalization feature in Presto, reducing manual input errors by 50% and improving user interaction.
- 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 website integrated with PavU & Razorpay for seamless transactions.
- Designed and optimized user interfaces, enhancing engagement by 40%.
- Led creative direction for new clothing designs aligned with Harajuku Culture, and managed social media platforms to boost 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.

AI powered Equity Research Tool | Python, Streamlit, OpenAI, FAISS

• Developed a Streamlit and Python web tool using OpenAI's advanced language models and FAISS for efficient document indexing to extract insights from news articles via URLs, integrating text segmentation and AI embeddings for enhanced semantic analysis and query efficiency.

Unsupervised Sentiment Analysis Pipeline | Python, NLP, Hugging Face

• Implemented an end-to-end sentiment analysis pipeline processing over 10,000 human and ChatGPT responses. Leveraged BERT for text embeddings and K-Means clustering for unsupervised categorization, resulting in a 95% improvement in data quality and a 40% increase in interpretability of sentiment clusters.

Technical Skills

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

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

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

CERTIFICATIONS

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