Prathu Vijayvargiya

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EDUCATION

SRM Institute of Science and Technology

Chennai, India

B. Tech in Computer Science and Engineering

June 2022 - Present

SKILLS SUMMARY

Languages: Python, JavaScript, SQL, Bash

Frameworks: Langchain, OpenCV, Pytorch, TensorFlow, Scikit-learn, Flask, Transformers, Node.js, React

Tools: MS Office, Git, Docker, Kubernetes, Terraform, Jenkins, GitHub Actions, ELK **Platforms**: AWS, Zapier, n8n, Jupyter Notebook, Google Colab, Supabase, Pinecone

WORK EXPERIENCE

Head of Public Relations

July 2024 - May 2025

SRM MUN Society

Chennai, India

- Managed all on-site volunteer staff for three national conferences, directly supervising 20+ volunteers per event and ensuring smooth operations and positive participant experiences throughout.
- Orchestrated comprehensive communication strategies encompassing targeted social media campaigns and press releases, achieving a 40% amplification in overall social media engagement metrics within six months.
- \bullet Spearheaded integrated promotional campaigns across social media and email marketing, resulting in a 25% surge in event registrations and a 15% increase in overall participant engagement.
- Researched and wrote 5+ articles on geopolitical issues, providing in-depth analysis and insights on global issues.

PROJECTS

AI-Powered API Call Analysis and Alert System | Docker, ELK, Prophet, ServiceNow, Slack

- Designed and implemented an AI-powered anomaly detection system for a microservices-based application using Isolation Forest and Prophet to identify abnormal API behaviours in real time.
- Built a scalable logging pipeline using Docker, Logstash, and Elasticsearch to collect, index, and store logs from six containerised microservices for further analysis.
- Integrated the ML-based anomaly insights with ServiceNow for automated incident management and Slack for real-time alert notifications, enhancing system reliability and operational awareness.
- Developed end-to-end visualisation dashboards using Kibana to monitor API call patterns and forecast trends, enabling quick decision-making through predictive analytics.

Continuous Sign Language Translator | Python, OpenCV, 3D-CNN, LSTM, Hugging Face Transformers

- Constructed a robust ASL translator, achieving 95% accuracy in text and speech translation, using multimodal deep learning techniques like 3D-CNN, LSTM, attention mechanisms, and a transformer-based decoder.
- Enhanced real-time performance by reducing model inference time by 40% through optimisation techniques such as quantisation, hardware acceleration, and frame buffering, ensuring low-latency translation.
- Performed detailed evaluation, improving Word Error Rate (WER) by 30% and BLEU score by 20%, while ensuring real-time responsiveness with a processing time of less than 200ms per frame for sign-to-text translation.

LeetSync | Python, GitHub Actions, GraphQL, Web Scraping

- Built a LeetCode-to-GitHub sync system that scraped over 500+ accepted submissions and extracted metadata for for the same using LeetCode's GraphQL API, improving personal code accessibility and visibility.
- Integrated a fully automated CI pipeline with GitHub Actions running daily cron jobs, reducing manual effort by 100% and maintaining 99.9% sync reliability for categorized uploads.
- Engineered a scraping and parsing module using Python and BeautifulSoup with multi-language support (Python, Java, C++), achieving 95%+ accuracy in code retrieval across problem sets.

CERTIFICATES

- Certified System Administrator by ServiceNow
- Certified Application Developer by ServiceNow
- The Complete 2025 Web Development Bootcamp by Dr. Angela Yu