Rohith Kumar Pittala

Stony Brook, New York · rohithkumar.p20@gmail.com · +19342464279 · linkedin.com/in/rohith-kumar/

Education

Stony Brook University
New York, USA
Masters in Computer Science.**GPA: 3.6/4** 2024-2026
Course Work : Computer Vision, Distributed Systems, NLP, Computer Networks, Visualization

Chaitanya Bharathi Institute of Technology
Telangana, India
Bachelor of Engineering in Artificial Intelligence and Data Science, **GPA: 9.14/10** 2020-2024
Course Work : *Machine learning, Deep Learning, Big Data Analysis, Business Intelligence, Data Science, Design and Analysis of algorithms, Data visualization, Operating System, Database Management Systems, Blockchain, Data Structures and Algorithms, Computer Networks,Artificial Intelligence,Full Stack Development.*

Skills

Languages:*C,R, Python, Go, Data structures, Java, HTML, CSS, JavaScript.*
Libraries\Technologies: *NumPy, Pandas, PyTorch, Keras, OpenCV,Tensorflow, gRPC, Git, Cryptography, Matplotlib, Mediapipe, HuggingFace, Spring Boot, Django, Flask, React, NodeJS.*
Databases: Redis, SQLite, MongoDB.

Internship Experience

- Worked as a Data Science Intern at Code Clause, where I developed and optimized a system by 20% for managing user reviews from WhatsApp chats, utilizing data analysis and automation to enhance user feedback processing and improve customer engagement.

Certifications

- **AZURE AI-900 (Microsoft).**
- **NPTEL Course on Innovation, Business Models, and Entrepreneurship.**

Academic Projects

Modified Paxos | Distributed Systems | Python, Redis,gRPC **Aug 2024 - Dec 2024**

- Designed and implemented a distributed transaction processing system for a banking application, enabling fault-tolerant intra-shard and cross-shard transactions using Modified Paxos and Two-Phase Commit protocols.
- Developed a horizontally scalable architecture with data of 3000 clients partitioned into shards and replicated across clusters to ensure high availability and consistency under fail-stop failure models.
- Enhanced system performance by optimizing throughput of 3500 transactions per second and latency while adhering to consensus requirements and implementing robust transaction handling mechanisms.

Deep Learning-Based Predictive Skin Disease Diagnosis and Analysis | Deep Learning | Python **Jan 2024 - May 2024**

- Developed a multimodal AI-powered skin health assessment project, utilizing advanced data analytics to enhance accessibility and enable early intervention, improving health outcomes for diverse user groups.
- Implemented advanced CNN models, including Xception, DenseNet 201, and ResNet50, to achieve 98.8% accuracy in disease classification via image analysis. Integrated SVM with RBF kernel for textual symptom prediction, and fused outputs from both algorithms to deliver highly precise and reliable skin condition diagnosis.
- Enhanced YOLO to achieve 97.8% accuracy in skin lesion detection, improving diagnosis and personalization; published at International Conference on Knowledge Engineering and Communication Systems (ICKECS) 2024.

Factual Consistency in LLMs: Reducing Hallucinations in QA Systems | Deep Learning |Python **Mar 2025- May 2025**

- Reduced hallucination in open-domain QA using Hugging Face transformer models (LLaMA-2, Mistral-7B, Mixtral-8x7B) via reranking and self-consistency decoding.
- Applied SentenceTransformer-based similarity for output selection, cutting hallucination by 40% and boosting BERTScore F1 from 0.85 to 0.93 on TriviaQA.
- Built scalable generation pipelines with Hugging Face and PyTorch, leveraging GPU batching and rigorous evaluation (accuracy, macro-F1, cosine similarity).