Harish Sista (He/Him)

No work authorization required

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SUMMARY

Ph.D. Candidate researching in ML and NLP with 7+ years of experience working with ML models, Big Data, and Cloud Computing platforms and 2+ years of experience working in a professional environment. Spearheaded an Evidence Extraction and Fact Verification model using Prompt Engineering and tested it with various LLMs. Invented a Black Box Optimization model for online hyperparameter fine-tuning, significantly enhancing model performance in real-time applications.

SKILLS

Programming Languages	AI Tools	LLMs	Data Engineering	Cloud Platforms	Research Interests
PythonSQLC++JavaSwiftHTML	PyTorchHuggingFaceTensorFlowAutoMLSciKitlearnNumPy	GPTLLAMABLOOMBERT	 AWS EC2 FireWorks AI Lightning AI Data Pipelines Data Augmentation 	AWSGoogle CloudGITHeroku	 NLP Generative AI AutoML Data Science

EDUCATION

Ph.D. in Machine Learning (Computer Engineering department)	01/2018 - Present
Stevens Institute of Technology, Hoboken	
M.Eng. in Software Engineering (Electrical Engineering department)	01/2014 - 12/2015
Stevens Institute of Technology, Hoboken	
B.Eng. in Electronics and Communication Engineering	08/2009 - 05/2013
M.V.S.R Engineering College, Hyderabad, TG, India	

RESEARCH EXPERIENCE

Infinity Lab, Stevens Institute of Technology - Hoboken, NJ

01/2018 - Present

- Work with various LLMs to address the challenges of Fact Verification using Prompt Engineering, Text Generation, Classification and Evidence Extraction Tasks.
- Built various Python Libraries using Multiprocessing to work efficiently with big datasets.
- Surveyed and implemented various Attention Networks, DNNs and Generative Models to perform NLP tasks of Data Extraction, Modeling, Regression, Ranking, and Classification.
- Collaborated in creating various Scientific, social media, and Misinformation Datasets.
- Developed an AI based iOS application to perform MoCA test for early detection of Alzheimer's.

WORK EXPERIENCE

Research Assistant, Stevens Institute of Technology – Hoboken, NJ

10/2018 - 09/2019

- Created a chemistry literature dataset for the purpose of similarity search with search queries.
- Preprocessed the dataset, using PDF conversion tools and NLTK library to remove the noise.
- Produced a Novel Generative Ranking Model using Topic Modeling and KeyPhrase analysis, to extract most relevant papers related to the search query.

AI Engineer/iOS Developer, Fresh Digital Group - NY, NY

07/2016 - 06/2017

- Collaborated with Content Writers and Creative Team to individually design and deploy ~30 chat applications for Amazon-Alexa which won appreciation from tech newsletters.
- Developed various iOS, iMessage and tvOS applications in conjunction with several teams.
- Helped company obtain a preferred partnership with Amazon-Alexa and launching partnership with Microsoft-Cortana.

CERTIFICATIONS

• Databases and SQL for Data Science with Python – IBM, Coursera

09/09/2024

Foundations of Objective-C App Development – University of California, Irvine

04/04/2016