Vijay Murari Tiyyala

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EDUCATION

JOHNS HOPKINS UNIVERSITY Baltimore, MD
MSE Computer Science Expected 2023

- Relevant course work: Machine Learning, Deep Learning, Data Science, NLP: Self-Supervised Models, Databases/SQL, Information Retrieval

VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE Vijayawada, India
Bachelor of Technology in Computer Science 2021

TECHNICAL SKILLS

Deep Learning Frameworks: PyTorch
Cluster Management: Slurm Workload Manager
Operating Systems: Linux
Programming Languages: Python, SQL, PHP
Database Management: Microsoft SQL Server

RELEVANT EXPERIENCE

Graduate Research Assistant Baltimore, MD
CENTER FOR LANGUAGE AND SPEECH PROCESSING | JOHNS HOPKINS January 2023 - Present

- Research Assistant under Prof. David Yarowsky
- Advancing low-resource multilingual machine translation in medical field
- Harnessing large language models for accurate translations
- Focusing on underrepresented languages
- Enhancing accessibility and comprehension for diverse populations

Business Technology Analyst Hyderabad, India
DELOITTE USI July 2021 - July 2022

- Developed efficient SQL queries and stored procedures for tax information management
- Analyzed client data using SQL and Power BI, improved DML script performance by 7%, and reduced data retrieval time by 20%

PROJECTS

Data Augmentation for Generating Dataset for Code Editing, PyTorch Spring 2023

- Created a dataset using natural language instructions for code editing, leveraging deep learning models and state-of-the-art text-to-code generation models

BENoAT: Better English Noisy Audio Transcriptions, PyTorch Fall 2022

- Developed a dual-stage pipeline with a transcription model and a denoising model for processing and revamping noisy audio transcriptions, concentrating on continuous performance enhancements

Framework for Human Activity Detection, PyTorch Spring 2020

- Implemented a high-performance LSTM model for human activity prediction, achieving 94th percentile accuracy in a mobile application

ACHIEVEMENTS

- Top 1% performer in CodeChef's Long Challenge
- top 5% in Google Code Jam 2020

INTERESTS

- Focusing on low-resource multilingual NLP to address linguistic disparities
- Exploring prompt engineering techniques for enhanced fine-tuning
- Delving into in-context learning strategies for improved model performance
- Investigating large language models and potential applications