Yashi Yadav

AI/ML Engineer | Data Scientist | Deep Learning Researcher
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SUMMARY

Aspiring AI/ML engineer with a strong foundation in computer science and hands-on experience in machine learning research. Seeking opportunities to apply and expand my skills in deep learning, natural language processing, and data analytics.

SKILLS

Languages: Python, Java, C++, JavaScript (React.js/Node.js)
AI/ML Frameworks: TensorFlow, NumPy, Pandas, NLTK
Cloud: Microsoft Azure, Docker
Data Visualization: PowerBI
Databases: SQL, MongoDB, PostgreSQL
Version Control: Git
Specializations: Deep Learning, Natural Language Processing, Data Analytics

EDUCATION

Master of Science in Computer Science   **(Expected 12/24)**
Purdue University, Fort Wayne, IN
Relevant Coursework: Applications of Deep Learning, Database Design and Systems, Analysis of Algorithms

Bachelor of Science in Computer Science   **(05/23)**
Purdue University, Fort Wayne, IN
Minor: Mathematics
Awards: Dean's and Semester's Honors List 2021, 2022 | Top 50 Award Recipient | Honor's Pin recipient, 2022

RESEARCH EXPERIENCE

Graduate Research Assistant (August 2023 - Present)
Purdue University Fort Wayne, IN

- Designing and implementing a deep learning model for steganographic applications using TensorFlow
- Incorporating Discrete Wavelet Transform (DWT) for enhanced data hiding in images
- Developing custom layers and loss functions to optimize model performance
- Creating a comprehensive pipeline for dataset preprocessing, model training, and evaluation
- Working on developing a novel DWT-based database to optimize the training process
- Preparing to document research findings for potential publication

PROFESSIONAL EXPERIENCE

Software QA Intern (May 2024 - Present)
Nokia, Sunnyvale, CA

- Fixing regression failures for the Network Infrastructure (NI) team's new in-house library (Siren)
- Gaining knowledge of MPLS protocols, BIER setup, LSP, LDP, and other network infrastructure components
- Collaborating with the CNS team to learn about microservices architecture and AI model deployment
- Exploring vector databases, embedding matching algorithms, and distance matrices for efficient data retrieval and analysis

PROJECTS

ASL Recognition (August 2023 - December 2023)

- Developing a deep learning model for American Sign Language (ASL) recognition in live and uploaded videos
- Implementing the model as part of a web application for ASL recognition

Adaptive Reading Companion (ARC) (Present)

- Creating a Chrome extension to enable bionic reading for people with Meares Irlen syndrome
- Implementing features for font customization, background color changes, focus mode, and text-to-speech
- Planning to incorporate vocabulary assistance using NLP techniques

Jerry: The Virtual Assistant (Present)

- Creating a virtual assistant that uses ChatGPT's API for communication and answering user queries
- Implementing voice recognition for user interaction
- Integrating Google's API for web search capabilities

CERTIFICATIONS

- Neural Networks and Deep Learning - DeepLearning.AI
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization - DeepLearning.AI
- Structuring Machine Learning Projects - DeepLearning.AI
- Introduction to Prompt Engineering for Generative AI - LinkedIn
- AWS DeepRacer: Building a Reinforcement Learning Model - LinkedIn
- MLOps Essentials: Model Development and Integration - LinkedIn
- MLOps Essentials: Model Deployment and Monitoring - LinkedIn
- Large Language Models: Text Classification for NLP using BERT - LinkedIn
- Multiple AI and Machine Learning courses from LinkedIn Learning

ACTIVITIES

Lead Instructor, Drone Camp, Purdue University Fort Wayne (June 2023 – August 2023)

- Programmed drones to fly at different speeds and heights, and overcome obstacles using Python
- Created and taught curriculum on Python programming and its applications to high school students