Vedant Ashish Jain

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🐙 My github

Technical Skills

Languages: Python ,C, C++, C#, Java, HTML, CSS, Sass, TypeScript, JavaScript

Frameworks/Tools: Keras, TensorFlow, PyTorch, React, Ajax, GSAP, NodeJS, Redux, Three.js, Jquery, Bootstrap, Git, Latex, Azure, AWS, Unity

Projects

Fine-Tuning of Wav2Vec2 for Speech-to-Text Conversion, NLP, Python, Pytorch

Burnaby, Canada
Jan 2024 to April 2024
Computer Linguistic

- Enhanced a pre-trained Wav2Vec2 model for speech-to-text (STT) applications by fine-tuning it on the LJ Speech dataset, which features a single speaker. The project aimed to advance automatic speech recognition (ASR) technology.
- Implemented convolutional neural networks (CNN) for high-level feature extraction, coupled with transformers for language modeling.
- Achieved a word error rate (WER) of 28%, indicating a significant enhancement in model accuracy. Successfully deployed the fine-tuned model for live transcription services, where it demonstrated exceptional performance and reliability.

NeuroVision AI, Biomedical Computing, Python, TensorFlow

Burnaby, Canada
Oct 2023 to Jan 2024
Computer Vision

- Worked within a team of five to engineer a sophisticated U-NET convolutional neural network with 28 layers, focusing on detecting and analyzing brain tumors in MRI images.
- My contributions were critical in ensuring comprehensive training and validation of the model for enhanced accuracy and reliability.
- Played a key role in the team that accomplished an exceptional accuracy rate of 99.48%, with a 1.64% loss and a 59.87% dice loss.

Image classification, Neural Networks, Python, Pytorch

Burnaby, Canada
Feb 2023 to May 2023
Computer Vision

- Led the development of an advanced image classification system using deep convolutional neural networks.
- Enhanced model performance by expanding and deepening the network architecture, enabling more intricate feature extraction from the Caltech-UCSD Birds dataset.
- Achieved a remarkable improvement in classification accuracy, with the model attaining an impressive accuracy rate of approximately 62

Vibrant Dreams, Web development, Designing

Mumbai, India
Oct 2019 to March 2020
Full Stack

- Conceptualized, designed, and deployed a dynamic website for an Event Management company, showcasing expertise in web development.
- Leveraged HTML, Sass, and JavaScript to craft an engaging and user-friendly Graphical User Interface (GUI).
- Enabled the client to reach a broader audience through online advertising, leading to increased visibility and business growth.

Education

BSc Simon Fraser University, Computer Science   Sept. 2020 to September
                                                                                          2024
  - **Coursework:** Software Development, Computer Architecture, Algorithms, Artificial Intelligence, Machine Learning, Data structures.

IB   MIT Vishwashanti Gurukul, IB Diploma   June 2018 to May 2020
  - **Coursework:** Physics, Math, Chemistry, Computer Science, English, Hindi .

Volunteer experience, Certificates

The "Human Feedback" in RLHF:

  - Contributed to a computer vision machine learning project led by a team of PhD candidates, by accurately cropping and labeling images for training the model.

Neural Networks and Deep Learning (DeepLearning.AI):

  - Completed a Specialization course with a grade of 99.50%.

Non-Technical Skills

Problem-Solving and Analytical Skills:

  - Developed strong problem-solving and analytical skills through rigorous coursework and engaging inpersonal projects. Proficiently approached complex problems, applying critical thinking and logical reasoning to identify innovative solutions.

  - Utilized a systematic and analytical approach to gather and evaluate data, enabling effective decision-making and successful outcomes for both coursework and personal projects.

Communication and Teamwork Skills:

  - Demonstrated exceptional communication and teamwork skills in various projects, promoting a productive work environment.