PARV PAREEK

✉ parvpareek21@gmail.com 🐦 @parvpareek_ ⌨ github.com/parvpareek 📞 9737012383 in linkedin.com/in/parvpareek

Education

Marwadi University, Gujarat **2022 – 2026**
Bachelor of Computer Engineering, CGPA: 9.2

Vapi Public School, India **2006 – 2021**
ISC (Class XII), 80%

Experience

Research Intern, IIT Indore **May 2024 – September 2024**
Under Dr. Chandresh Maurya *Indore, India*

- Worked on **speech models** and large language models (**LLMs**) to classify Alzheimer's disease patients based on speech.
- Reviewed and implemented **research papers**, applying novel techniques to real-world speech processing problems.
- Gained in-depth expertise in applying deep learning solutions to complex speech-related challenges.

Projects

Hindi Text Summarizer — *PyTorch, HuggingFace* (GitHub)

- Fine-tuned an IndicBART transformer on the ILSUM dataset using PyTorch and the HuggingFace library, achieving a ROUGE-1 score of 0.46.
- Developed a custom finetuning script for efficient model training, demonstrating expertise in Indic NLP and text summarization.

Neural Machine Translation: English–Mandarin — *PyTorch, NLTK* (GitHub)

- Implemented a sequence-to-sequence model with a **bidirectional LSTM encoder** and **unidirectional LSTM decoder** in PyTorch, integrating **Bahdanau attention** to mitigate the information bottleneck.
- Preprocessed corpora using **NLTK**, trained the model end-to-end, and achieved a **BLEU score of 36.5** on the test set.

Multitask BERT (SimCSE Framework) — *PyTorch, NumPy* (GitHub)

- **Fine-tuned** BERT using **contrastive learning (SimCSE)** on three downstream tasks: sentence similarity (SemEval STS Benchmark), paraphrase detection (Quora), and sentiment analysis (SST).
- Achieved strong performance: **93% accuracy** on STS, **88%** on Quora paraphrase detection, and **94%** on SST sentiment classification.
- Built **end-to-end** PyTorch pipelines for data loading, model training, and evaluation, optimizing for cross-task generalization.

Technical Skills

Machine Learning: PyTorch, HuggingFace, W&B, scikit-learn, NLTK, NumPy, Pandas, LangChain, PySpark, SAS
Web Technologies: Express, React, MongoDB, PostgreSQ, FastAPI, TailwindCSS
Cloud Technologies: AWS, Docker, CI/CD, Github Actions
GenAI: DSPy, OpenRouter, OpenAPI, Gemini SDK, LangChain, LlamaIndex, Neo4J, Pinecone
Languages: Python, C++, TypeScript

Achievements

- **Second Prize Winner** at an **AI + Blockchain** hackathon for building autonomous communication agents.
- Organized and hosted a **tech meetup** of **150+** developers as a Tech Team member of DeCodeCafe community.

Certifications

AWS Academy Graduate - AWS Academy Cloud Foundations **Nov 2024**

Advanced Learning Algorithms by DeepLearning.ai **Credential ID: FPPE6H2CPDME**