Deekshith Dade

SUMMARY

Over 3 years of experience in software development and research with proficiency in Deep Learning and Web Dev. Ability to collaborate with talented teams and contribute to cutting-edge projects, leveraging technical expertise and research acumen to deliver impactful solutions with the ability to master new technologies and adapt to evolving tech stacks quickly.

Skills

- Programming Languages: Python, C++, Java, JavaScript, TypeScript, Go, Node.js
- Data Science and Machine Learning: Statistics, Probability, Computer Vision, Scikit-Learn, Pandas, ETL, SQL, Pyspark
- Frameworks: Pytorch, Tensorflow, ReactJS, Flask, Django, Spring, Spring Boot
- Cloud Technologies: Amazon Web Services(AWS), Microsoft Azure, Google Cloud Platform(GCP), Docker, Kubernetes

WORK EXPERIENCE

Scientific Computing and Imaging Institute @ University of Utah

Graduate Research Assistant

- Performed a survey of augmentations on Electrocardiogram by implementing multiple augmentations for time series data from the literature, trained on a self-supervised momentum contrast(MoCo) framework published by Facebook AI Research(FAIR), which is set to publish in October in Computing in Cardiology Conference(CinC) 2024.
- Implemented a novel self-supervised learning architecture with a sophisticated contrastive learning setup for Learning Electrocardiogram representations with unlabelled data, resulting in 10% labeled data on a pre-trained model, producing performance equivalent to a 100% labeled supervised model in the area under the receiver operating characteristic (ROC) curve (AUC) metric.
- Currently working on a novel interpretability method for ECG-Classification models by modifying the Generative Adversarial Networks(GAN) system to produce interpretations as modifications to the signal.

ZS Associates

Business Technology Solutions Associate

- Worked on company's proprietary software which uses advanced data processing using Hadoop to build efficient data pipelines for client's marketing requirements
- Designed Customer centric marketing for big pharma clients based on data from various vendors.
- Deployed field suggestions and resource optimized recommendations for sales representatives for multiple clients building data pipelines from scratch using pharma data from various data vendors and configured user interface through Zaidyn FI and/or Veeva CRM app for client's sales representative's efficient insights and usage
- Built a data pipeline for providing dynamic insights for sales representatives which takes into account the actions and the feedback the representatives provide and produce more efficient actions for the next cycle of customer interactions

ZS Associates

Business Technology Solutions Associate Intern

- Led the development pipeline for a client's marketing campaign focused on promoting a new product utilizing machine learning to optimize omnichannel marketing strategies. Achieved a 20% increase in initial sales beyond projections.
- Rapidly learned and integrated new tools into the development workflow and optimized existing code to streamline processes. These improvements led to around 25% reduction in deployment time, enhancing overall pipeline efficiency

EDUCATION

University of Utah

Masters in Computer Science GPA: 3.83

Projects

Assess Transformers' ability to classify long documents

- Conducted a survey on various transformer models to evaluate their performance in classifying long documents. The study compared simpler models like BERT and DistilBERT with more complex models such as Longformer, GPT-2, and ToBERT across four datasets of varying sizes and domains.
- The findings revealed that simpler models often performed as well as, or better than, their more complex counterparts. Notably, DistilBERT, with 70M parameters, outperformed GPT-2, which has 127M parameters, in four out of six classification tasks by about 2%.

Mars Image Captioning and Retrieval Web Application

- Developed a fine-tuned CLIP model for Mars image recognition, creating custom image-caption embeddings that enable advanced semantic search capabilities across a space imagery dataset.
- Constructed a full-stack web application with FastAPI backend, ChromaDB vector database, and Next.js frontend, dockerizing the entire solution to provide a seamless, scalable image querying and retrieval platform.

Jan 2024 - Current

Salt Lake City, United States

Jul 2022 – Jul 2023

Bangalore, India

August 2023 - Present Utah, United States

Jan 2022 - July 2022

Bangalore, India