ADITYA RATAN JANNALI

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OBJECTIVE

Seeking a challenging position in a dynamic organization that values creativity, collaboration, and a strong desire to build products that benefit our society.

EXPERIENCE

Amazon: Application Engineer III   Aug 2021 - Aug 2023, *Chennai, India*

- Front-line support to AEE, and MENA Data Engineering Team. Brought 35% decrease in incoming tickets from FY 2022-23, saving 20hrs/month of engineers' time by leading the OE Ticket Reduction Campaign.
- Designed, developed, and tested plugins to collect metrics and usage stats and publish the data on Quicksight. The design uses AWS services including - IAM, Athena, Redshift, Quicksight, and more.

Amazon: Software Support Engineer Intern II   Jan 2021 - July 2021, *Chennai, India*

- Designed, developed, and tested an automated tool utilizing internal APIs, AWS S3, IAM, Redshift, and Python as the backend. This tool efficiently collects service metrics and their statistics, then disseminates aggregated performance metrics to the respective teams responsible for those services.
- Assumed the role of a release engineer, taking ownership of the production deployment for multiple pipelines while ensuring their smooth operation.

Antpod: System Development Intern   April 2020 - Dec 2020, *Chennai, India*

- Involved in research and the development of a proof of concept for an unmanned vehicle in the 'Land Stress Identification and Remote Sensing' field.
- Created a CNN model using Keras and TensorFlow to effectively function as a multilabel image classifier.

EDUCATION

Masters in Artificial Intelligence,   Sept 2023 - May 2025
Northeastern University (GPA: 4)   *Boston, MA*

Bachelor of Technology in Electronics and Communication Engineering,   July 2017 - June 2021
Vellore Institute of Technology (GPA: 9.11)   *Chennai, India*

SKILLS

Languages & Libraries Python, Java, transformers, numpy, gym, pytorch, pygame, pymunk, Keras, TensorFlow, sklearn, pandas, OpenCV, matplotlip, seaborn, C++, SQL (MySQL, and PostgreSQL), HTML, shell, CSS, JS.

Frameworks Huggingface, git, AWS - Redshift, Quicksight, S3, Secret Manager, IAM, EC2, ECS, VPC, Sagemaker, Athena, DynamoDB, Amazon MWAA, Cloudformation, KMS.

Certifications Coursera - Machine Learning, Deep Learning, CNN, NLP, Digital Image Processing

PROJECTS

Detecting LLM-Generated Text Using Fine-Tuned Transformers: A Comparative Study - [github] In this work, we finetune and evaluate two compact but powerful transformer models, ALBERT and DeBERTa-XS, on the DAIGT Proper Train dataset to detect LLM-generated essays. Our experiments show that both models perform quite well, with DeBERTa-XS achieving 99.43% accuracy and ALBERT achieving 96.57% accuracy. We analyze the results and discuss potential directions for future work. Overall, these findings demonstrate the feasibility of using finetuned transformer language models as a potential solution for LLM text detection.

Image Processor - [github] Designed, implemented, and thoroughly tested an MVC for an image processing application that performs image manipulative operations. The controller implements a command design pattern to process user activity.

S.H.A.P.E.R. - [github] Collaborated in developing the collision handler and environment setup of an AI simulated hand that deflects an incoming object from hitting its target to a different goal post. The uniqueness of the project is the use of genetic algorithms to train a neural network that predicts the position of the arm.