ADITYA RATAN JANNALI

+19167767065 jannali.a@northeastern.edu https://www.linkedin.com/in/aditya-ratan-j/ https://github.com/rjaditya-2702

EDUCATION

MS in Artificial Intelligence,	September 2023 – May 2025
Northeastern University (GPA: 4.00),	Boston, MA

Courses: Foundations of Artificial Intelligence, Machine Learning, Algorithms, Programming Design Paradigms.

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

Courses: Statistics, Calculus, Linear Algebra, Probability Theory, Data Structures, Machine Learning, Digital Image Processing.

EXPERIENCE

Amazon	August 2021 – August 2023
Application Engineer III	Chennai, India

- Front line support to AEE product and MENA Data Engineering and Science team. Lead the ticket reduction campaign and brought 35% reduction in incoming tickets, saving 20hrs/month of engineers' time.
- Took ownership in designing and building plugins, dashboards, and ETLM pipelines to generate and display pipeline health metrics, usage patterns and cost utilization of resources with Python, PostgreSQL, and AWS. These dashboards and plugins are used by leadership in weekly and monthly business reviews for load assessment and informed decision-making.

Amazon	January 2021 – July 2021
Software Support Engineer II Intern	Chennai, India

- Designed, developed, and deployed a utility that collects service level raw data and distributes aggregated metrics to relevant service owners and stakeholders. This utility streamlines data management, enhances information accessibility, and facilitates decision making for key personnel.
- Assumed the role of release engineer, taking ownership of production deployment for multiple pipelines while ensuring their smooth operation.

Antpod	April 2020 – December 2020
System Development Engineer Intern	Chennai, India

- Involved in Research and Development of a proof of concept for an unmanned vehicle in 'Land Stress Identification and Remote Sensing'.
- Prototyped an algorithm using Deep Fully Connected Convolution Network using Keras and TensorFlow to segment images from the dataset and perform classification to identify plant disease.

SKILLS

Languages:	Python, Java, C++, SQL, HTML, CSS, JS, shell.
Libraries:	OpenCV, sklearn, pytorch, Keras, TensorFlow, gym, transformers, pandas, NumPy, matplotlib,seaborn.
Frameworks:	git, huggingface, AWS – Redshift, IAM, S3, Secret Manager, IAM, EC2, ECS, VPC, KMS Sagemaker, Secret Manager, QuickSight, Athena, DynamoDB.
Certification:	Machine Learning, Deep learning using TF, Digital Image Processing, NLP – Classification And Vector Spaces, Probabilistic Models.

PROJECTS

1. **Multiagent Tic-tac-toe** [GitHub]   May 2024 – June 2024
   Implemented Q-Learning to train two agents with different reward schemes to play against each other. Each valid board configuration is a state in this environment which is modelled as a 9-digit ternary sequence eliminating the need to precompute the observation space.

2. **LLM generated vs Human text classification** [GitHub]   April 2024 – April 2024
   Finetuned and evaluated two transformer models, ALBERT and DeBERTa-XS on DAIGT Proper Train dataset to detect LLM generated essays. Achieved an accuracy of 96.57% for ALBERT, and 99.43% for DeBERTa.

3. **Image Processor** [GitHub]   November 2023 – December 2023
   Designed and MVC, developed and wrote unit and integration tests for an image processing application that performs various image manipulations on custom images. The controller uses command design pattern to listen and process user interaction, and JSwing for the view.

4. **S.H.A.P.E.R** [GitHub]   November 2023 – December 2024
   Collaborated in developing the collision handler and environment setup of an AI controlled hand that deflects incoming object from hitting the target. This project makes use of genetic algorithm to train a neural network that generates the movement of the arm at each time step.