PRATEESH REDDY PATLOLLA

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EDUCATION

Indiana University Bloomington, ***GPA: 4/4***
Bloomington, IN, US
Master Of Science in Data Science Jan 2021 – Dec 2022
Course Work: Machine Learning, Advance Database Concepts, Elements of Artificial Intelligence, Deep Learning systems, Data Mining, Applied Algorithms, Big Data Management, Statistics

Gandhi Institute of Technology and Management University ***GPA: 3.8/4***
Hyderabad, India
Bachelor of Technology in Computer Science and Engineering July 2016 – April 2020
Relevant Course Work: C, C++, Java, Python, Linear Algebra, Statistics, Data Structures and Algorithms, Data Mining, Machine Learning, Artificial Intelligence, Software Engineering

WORK EXPERIENCE & INTERNSHIPS

Data Scientist Intern, Alexa AI Amazon **Santa Barbara, CA**
Technologies: Pyspark, Python, AWS Quicksight, AWS EMR May 2022 – August 2022

- Low-frequency Alexa questions had higher confidence intervals/margin of error. Performed Stratified sampling using various distributions and compared them using spark in AWS. The result led to a change in Alexa tables' data pipeline.
- Performed the Re-training for the categorizer model with improved accuracy which is the machine learning model which categorizes Alexa questions into various subcategories like Weather, Knowledge, and Skills.
- Created a dashboard for historical comparison of Alexa's successful answering metric with the target and baseline which is now being used in Alexa-wide weekly webinars to discuss the overall performance.

Research Data Analyst, Indiana University **Bloomington, IN, US**
Technologies: Python, R, Tableau, SQL. Jan 2021 – Present

- Developed data pipelines and Tableau reports for providing insights into student performance, retention, and graduation distribution. This is now being used in making key decisions like approving pre-requisite course waivers and has changed 4 courses' prerequisite status in the Indiana University curriculum
- Developed reports on Ph.D. students' life cycle data from enrollments to time to degree to outcomes in two versions full access and restricted for Internal decision support and public-facing on the Indiana University grad school website.

Data Science Intern, CYIENT Limited **Hyderabad, India**
Technologies: Python, Transfer learning, PCA, Data Augmentation Dec 2019 – Mar 2020

- Extracted road sign boards through object detection from terrestrial imagery to minimize manual efforts of data annotation for North American-based client.
- Achieved a hit rate of 92%, resulting in a saving of 12 FTEs.

SKILLS

- **Programming:** Java, Python, R, SQL, Pyspark, JavaScript, C++, C, SQL
- **Web:** Flask, Django, React JS, HTML, CSS, REST, Microservices
- **Databases:** MongoDB**,** MySQL, PostgreSQL
- **Cloud Distributing Services:** Amazon Web Services (AWS), DevOps
- **Tools:** Tableau, Linux, Git, Docker/Kubernetes

ACADEMIC PROJECTS

Cognitive Search Engine by NLP:

- Provided Cognitive search capability for Eli Lilly and company to search against databases like FDA and EMA via natural language questions and return relevant results to help with accelerating regulatory submissions for Eli Lilly.
- Performed abstraction-based Natural language generation methods like T5 Transformer, GPT- 2 Algorithm, and BART Transformer.

Face Generative Adversarial Networks (GANs):

- This project solves the issue of misclassification even for the popular models by the ability to generate millions of relevant image data. The uniqueness of this project lies on generating any required style of data using Neural Style Transfers and GAN.

MERN Stack Social Media Application:

- This Application uses React and Redux for the Front End and Node.js, Express.js, and MongoDB for the Back End.
- It is a social media app that allows users to post interesting events that happened in their lives.

Traffic Signboard Classifier:

- Standard computer vision methods used to detect and classify traffic signs take considerable and time-consuming manual work to handcraft important features in images.
- Instead, this process could be automated by applying Tensorflow Data pipelines to reliably classify traffic signs.

PUBLICATIONS & LEADERSHIP EXPERIENCE

- Published a research paper on Protecting banking Transactions using 'Blockchain Technology without tokens' in International Journal on Emerging Technologies ISSN No. 0975-8364
- Given a GUEST LECTURE on TABLEAU technology along with NORIKO HARA Z637: Information Visualization on March 2021.
- Graduate Ambassador for Indiana University (2021 - present) organize sessions with students to help them connect with required departments and answer their queries. Received Luddy Outstanding Leadership Award for 2022