ISITA POLAMARASETTI

LinkedIn | 832-806-9945 | ip22@rice.edu | GitHub | Personal Portfolio

Skills

- Python | React | Java | JavaScript | jQuery | Node | Express | HTML | CSS | PostgreSQL | MySQL | Streamlit | BeautifulSoup | MS Excel
- Pandas | Seaborn | Numpy | Matplotlib | sci-kit learn | Tableau | CI/CD | spacy | nltk | hugging face | Unit Testing | Jest | REST | OOP
- Machine Learning | Responsive Web Design | Web Development | Frontend | Backend | Full-Stack | Microservices | NLP | Git

Experience

Automation Engineer — **Footsteps LLC (Amazon Delivery Partner)** — *CA, USA* — **02/2023 - 07/2023**

- Leveraged statistical modeling, machine learning, and data mining techniques to extract actionable insights from extensive datasets, facilitating data-driven decision-making, performance enhancement, and uncovering growth patterns and areas for improvement.
- Developed and implemented advanced automation solutions to optimize operations on the Amazon logistics website. Employed web scraping techniques, API integrations, and custom scripts to streamline critical processes, resulting in significant efficiency gains.

Data Science Intern — **Pharmapro Tivra Health LLP** — *Mumbai, India* — **10/2022 - 07/2023**

- Designed and implemented classifiers using natural language processing (NLP) techniques for the categorization of complex biomedical clinical trial data. Leveraged machine learning algorithms, such as SVMs and RNNs, to achieve high accuracy in data classification tasks.
- Created concise and informative visualizations to communicate analytical findings effectively. Developed interactive dashboards and data-driven applications with database connectivity using tools such as Tableau and Python libraries.
- efficiently harnessed healthcare APIs from authoritative sources, including nih.gov.in, to extract structured medical data and resources.

Research Intern — **University of Illinois Urbana Champaign** — *Illinois, USA* — **06/2022 - 07/2023**

- I worked under the guidance of Professor Ashish Khandelwal. Executed data scraping tasks using Python libraries, such as Selenium and Tweepy. Employed web automation techniques to extract structured data from online sources, ensuring data accuracy and reliability.
- Engaged in various NLP-driven projects, demonstrating proficiency in text analysis tasks. Successfully conducted personality analysis, emotion detection, and sentiment analysis using NLP techniques and libraries such as NLTK and SpaCy.
- Developed and maintained the front-end of web applications using React, enhancing the user experience and ensuring responsive and performant UI.

Education

Masters — **Rice University** — *Houston, TX, USA* — **08/2023 - 05/2025**

- Major in Computer Science

Bachelor of Technology CGPA - 9.42/10 — **Gitam University** — *Vizag, India* — **07/2019 - 04/2023**

- Major in Computer Science and Engineering

Projects

- **Film Recommendation System:** Designed and implemented a sophisticated film recommendation system capable of providing personalized film recommendations based on user preferences. Utilized the Negative Matrix Factorization (NMF) algorithm to efficiently reduce the dimensionality of the film-feature matrix.
- **Lybrate Project:** Predicts the fee charged by a doctor based on the doctor's qualifications, background etc.,. mined from lybrate.com. Developed a robust web scraping system to extract detailed information about doctors. Built a classifier model using the XGBoost algorithm to categorize doctors. Developed a regression model to predict the consultation fee charged by doctors.
- **GradHub - Mentorship Initiative & Grad School Predictor:** Architected GradHub with React and Node.js, fostering connections between high school students and college mentors for personalized guidance. Built the Grad School Predictor using Flask API and machine learning,predicting grad school admission likelihood based on academic metrics.
- **Analyzing Deep Learning Models Performance in Detecting Brain Cancer:** Utilized deep learning models, including Inceptionv3, ResNet50, and VGG, to achieve a 97.79% accuracy in brain tumor detection using MRI images, potentially enabling faster and more accurate diagnoses for improved patient outcomes.

Achievements

- Graduated Bachelor's with distinction, achieving an outstanding CGPA of 9.42 out of 10, reflecting my exemplary academic performance.
- Awarded with a 25% scholarship in recognition of my exceptional academic achievements during my bachelor's degree.

Extra Curriculars

- **Customer Service Representative at Rice Athletics:** Efficiently managed ticketing transactions through specialized ticketing software.
- **Student Assistant at The Fondren Library:** Managed the Interlibrary Loan Request Process, handled database operations, and meticulously evaluated requests for books, articles, and research materials from Rice University patrons to ensure timely access to needed resources.