PRASOON RAJ

Boston, MA | raj.pr@northeastern.edu | +1-(857)-991-9119 | Portfolio | LinkedIn | GitHub

EDUCATION

Northeastern University, Boston, MA

Sept 2023 – June 2025

Masters in Applied Machine Intelligence – 3.96 GPA Relevant Courses – Applications of AI, Predictive Analysis, Project Management

Kalinga Institute of Industrial Technology, Bhubaneswar, India

July 2015 - May 2019

Bachelors of Technology, Electronics and Electrical – 3.75 GPA Relevant Courses – Object-Oriented Programming, RDBMS

SKILLS

Technical Skills: Machine Learning, Deep Learning, Python, R, NLP, Tensorflow, Keras, Pytorch, MySQL Tools: Microsoft PowerBI, MongoDB, SQL Server, Azure DevOps, Selenium, Postman, VBA Cloud Services: AWS(Bedrock, Lambda, S3, Kendra, DynamoDB, CloudFormation, EC2, Cognito)

Domain Expertise: Healthcare, Retail, Public Sector

WORK EXPERIENCE

Burnes Center for Social Change, Boston, Massachusetts **Generative AI Product Development Co-op**

July 2024 – Present

- Engineered and implemented a hyper-personalized agentic chatbot solution utilizing **Retrieval-Augmented Generation (RAG)** technology, processing **100**+ documents to provide contextual support for Massachusetts state Executive Office employees.
- Orchestrated a robust **AWS**-based architecture leveraging Bedrock, Lambda, S3, Knowledge Agent, DynamoDB, and Guardrails, resulting in a **20% increase** in project efficiency and a **15% reduction** in delivery time
- Led the project problem definition phase by conducting a thorough analysis to identify actionable strategies which resulted in improved operational processes and tangible benefits for the Commonwealth of Massachusetts

Enquero – Genpact, Bengaluru, India

Aug 2022 – Aug 2023

Senior Data Scientist

- Implemented a **machine learning model** for a top **retail** brand, clustering items to identify low performers by similarity and region, resulting in a **15% cut** in production costs and an **8% rise** in net profit.
- Automated the entire sales and demand report generation process in **PowerBI** using **Python**, decreasing preparation time by 90% and **reducing human effort** by 80%
- Designed a Python script to **boost end-to-end advance analytics** for **10+** problem spaces across **5+** domains and integrated it with a **Flask API** to handle the user input and enable future application integration
- Trained **500 new interns** on **Deep learning** concepts and mentored them for the **GenAI Hackathon**, enhancing their skills and helping them build their solutions

Accenture, Bengaluru, India

June 2019 - Aug 2022

Data Science Analyst

- Developed a scrubbing tool for a leading **healthcare** company using **Python** and **Machine Learning** to remove sensitive client information from various file types, which 200+ clients utilized for over 80% of their documents
- Optimized the image classification scrubbing tool using a CNN model with **TensorFlow-Keras** to **cut human effort by 70%** and further enhanced efficiency by integrating the YOLO module with PyTorch, **reducing manual effort** by an additional **15%**
- Designed an API using the **Django** Framework and **NLP** concepts to identify attributes from user inputs providing smart results and enhancing user experience based on identified characteristics across 5 different platforms
- Engineered a dashboard by applying **logistic regression** on a dataset with **10,000+ rows** of data to determine key attributes to gain insights and visualize them using PowerBI for better decision-making
- Produced detailed reports with web scraping and Computer Vision for 3000+ employees, enhancing decision-making.