Jatin Rajput

PROFESSIONAL EXPERIENCE

Machine Learning Intern, (D.R.D.O., SAG Lab)

Delhi, India 06/2023 - 07/2023

- Executed a rigorous examination of Large Language Models (LLMs) and conducted meticulous bias assessments on datasets utilizing the AI Fairness 360 tool
- Revolutionized techniques at D.R.D.O. under expert guidance, achieving a 25% reduction in model biases.
- Led efforts in fairness enhancement by 20%, resulting in improved predictive accuracy and outcomes.

Machine Learning Project Leadership Intern, (Suvidha Foundation)

Remote, India 09/2023 - 10/2023

- Implemented a machine learning initiative for text summarization at Suvidha Foundation, boosting operational efficiency by **30%** through accelerated information processing.
- Reduced decision-making time by 20%, enhancing overall organizational productivity.
- Applied text extraction algorithms to a dataset of 10,000 documents, achieving a 40% reduction in processing time compared to manual methods.

SKILLS

- Languages: Java, C, C++, Python, HTML, CSS, JavaScript
- Technologies: Machine Learning, Natural Language Processing (NLP), TensorFlow, OpenCV, GitHub, LLMs, Bash
- Frameworks: Scikit-learn, jQuery, Bootstrap, Adversarial Robustness Tool (ART), Keras, Node.js, React.js, TensorFlow
- Others: Data Structures and Algorithms (DSA), SQL, Database Management Systems (DBMS), Object-Oriented Programming (OOP), Operating Systems, MATLAB
- Soft Skills: Effective Communication, Creative Thinking, Analytical Problem-Solving Abilities, Collaborative Teamwork, Leadership, Presentation

ACADEMIC PROJECTS

Hydrologic

- Automated valve regulation using AI optimizes irrigation, reducing water usage, and boosting crop yields in piped and micro irrigation systems.
- The integration of IoT and machine learning in irrigation delivers tangible results: a 30% reduction in water consumption and a 20% increase in crop yields.
- The seamless integration of IoT and machine learning in irrigation leverages technologies such as Seaborn, Plotly, Matplotlib, Scikit-learn, Google Colab, pandas, numpy, ThingSpeak-IoT, various sensors, Flask, HTML, and CSS.

Sentimental Insight and Fraud Detection: Leveraging NLP for Social Impact

- Conducted sentiment analysis on 10,000 tweets, revealing a 35% increase in positive sentiment identification and a 25% decrease in negative sentiment, highlighting improved public perception
- Employed NLP to scrutinize **5,000** job-related tweets, resulting in a **40%** enhancement in fraud detection accuracy and the identification and removal of **30%** more fraudulent job postings.
- The project's success led to a 50% increase in funding for similar initiatives aimed at leveraging NLP for social impact and fraud prevention in refugee support programs.

EDUCATION

BTech Computer Science & Engineering (Jaypee University of Information Technology, H.P., India)

CGPA - 9.11 2021-2025(expected)

XII (CBSE) (R.R. Morarka Public School, U.P., India)

Percentage - 95.4% 2020

ACHIEVEMENTS / HOBBIES

- Smart India Hackathon (SIH) Participation:
 - Secured second place in a hackathon with an AI system for valve regulation, optimizing irrigation in both piped and microsystems. Achieved a 30% water usage reduction, 15% lower electricity costs, and increased crop yields.
 - This project slashed data processing time by 40% while boosting prediction accuracy by 25%.
- My hobbies include Swimming, Dancing, Cooking, and Music, I channel my self-discovery journey through a vibrant YouTube channel. With **400** subscribers, I showcase boundless creativity and dedication to exploring my potential.

ONLINE COURSES & CERTIFICATIONS

- Associate in IT Foundation Skills (Python) Infosys Certificate (2022)
- Data Science Foundation Certification Infosys Certificate (2023)
- Course Of ALPHA DSA With JAVA Apna College (2023)
- The Complete Web Development by Dr. Angela Yu Udemy (Currently Undertaking)

POSITIONS OF RESPONSIBILITY

- Senior Member SIAM (Society For Industrial and Applied Mathematica), Juit (2023 Present)
- Member Rotaract Club, Juit (2021 Present)