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Total Energies, India

Hello,

I am Harsh Sagar, 5th year Biological Sciences student at IIT Madras. I wish to apply for Data Scientist position at Total Energies. I had worked on Detection of Milk Adulterant using ML Techniques project for Summer Research Internship, IIT Bhubaneshwar. Analysed milk properties such as foamability, foam stability, foam height etc as the demand for Cappuccino foams has increased. Used Grid search cv for hyperparameter tuning on Random forest classifier, which increased test accuracyto 88.1% from 81.7% also increased roc auc score to 0.953771 from 0.946013. This work also got published as research paper in Springer publications.

Worked on the classification of the gene expression of endometrial biopsies as a data science intern at Supratech Lab, Gujarat. To select the genes involved in endometrial receptivity to be included in the ERA, the gene ontology terms with a P value less than .025 were considered significant. For the endometrial receptivity transcriptomic signature, two different comparisons were made, the first was the differential expression of R versus P and E and the second was that of P versus E in the ERA. These statistically significant genes were isolated during the Window of Implantation. Used Grid Search CV for hyper parameter tuning of XGBoost model for prediction.

Working on these internships I have developed extensive knowledge and expertise in the field andgained valuable experience in various aspects of research work. Moreover, my previous roles have helped me to develop and significantly improve my attention to detail and accuracy and gave me achance to see and feel what it's like to be a part of a deadline-driven and fast-paced business environment. In addition to my experience, I can offer your firm excellent analytical skills and important multitasking and time management abilities. Not only they are necessary for the job butalso serve as an evidence of a data-driven mindset which I believe I possess.

TotalEnergies' commitment to innovation, sustainability, and professional development resonates with your career aspirations. The opportunity to work on digitalization projects aimed at enhancing the integrity of underwater equipment aligns with your academic background and interests in data science and technology. My experience in developing machine learning models for real-world applications, such as conversational question answering systems and ML modeling for optimizing IVF processes, has equipped me with the skills necessary to analyze large and complex datasets, which I believe will be invaluable in fulfilling the responsibilities

Overall, I believe that my background in data science, research experience, and passion for social impact make me well-suited for the Data Scientist role at Total Energies. I am eager to bring my skills and expertise to the team and contribute to the firm's mission of delivering research-driven solutions to its clients.

Over and above, I am a good team player also I have ability to compromise, listen to my teammates and always passionate to learn from my seniors. I'm reliable and willing to work above and beyondwhat is required to get going on any assignment with enthusiasm.