

JAY PADHIYAR

+91 73834 09061 ◇ Gandhinagar, Gujarat

[Mail:jaypadhiyar62689@gmail.com](mailto:jaypadhiyar62689@gmail.com) ◇ [Linkedin:Jaysinh Padhiyar](#) ◇ [Github:Aremstrom](#)

EDUCATION

Master of Technology , Pandit Deendayal Energy University, Gujarat Course: Data Science	Expected 2024 <i>CGPA: 8.72</i>
Bachelor of Engineering , Gujarat Technological University, Gujarat Course: Computer Engineering	2019 - 2022 <i>CGPA: 8.47</i>
Diploma , Gujarat Technological University, Gujarat Course: Computer Engineering	2016 - 2019 <i>CGPA: 7.49</i>
10th , Shree Swaminarayan Gurukul Vidyalaya , Gujarat Board: Gujarat Secondary and Higher Secondary Education Board, Gujarat	2016 <i>Percentage: 59%</i>

SKILLS

Technical Skills

Programming Languages:	Python, JavaScript, Java, C++
Developer Tools:	Git, Github, Visual Studio Code, Anaconda
Frameworks	Django, React, Flask, Angular, Express.js
Cloud/Databases	Google Cloud, Azure, MySQL, MongoDB

Soft Skills And Interests

Soft Skills	Adaptability , Communication, Problem Solving, Collaboration
Coursework	Data Structures, Machine Learning, Deep Learning
Areas of Interest	Large Language Models, Machine Learning, Deep Learning

EXPERIENCE / INTERNSHIP

Zydus Lifesciences Data Science Intern	Jun 2023 – Present <i>Ahmedabad, Gujarat</i>
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- Focused on studying Loss on Drying (LOD) and Compression Force during Zydus internship.
- Utilized data collection, analysis, and advanced machine learning models to predict LOD and Compression Force parameters accurately, ensuring product stability and maintaining tablet quality.
- Developed an AI chatbot for analysis.

BISAG-N Machine Learning Intern	Jan 2022 – Jun 2022 <i>Gandhinagar, Gujarat</i>
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- Actively contributed to a project at Bisag-N focused on detecting and assessing the legitimacy of phishing sites.
- Utilized machine learning algorithms and data analytics to enhance the accuracy of the system in identifying security threats.
- Deepened understanding of machine learning applications for proactive risk mitigation through practical experience.

PROJECTS

Study and Prediction of L.O.D(Loss On Drying) Compression Force In Pharma	Jun 2023 - Present
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- Tools technologies used: PI System(OSISOFT), Visual studio Code, Python , Machine Learning
- I've concentrated on studying Loss on Drying (LOD) and Compression Force in pharmaceuticals. LOD ensures product stability, while Compression Force maintains tablet quality. By gathering data from PI WEB API hosted on Azure, I aim to predict these parameters accurately. Moreover, I've developed an AI chatbot for analysis, improving pharmaceutical product quality and reliability.

- Tools technologies used: Python, Large Language Models , Visual studio Code
- L.o.R.A((Low-Rank Adaptation of Large Language Models) and Q.L.o.R.A(Quantized Low-Rank Adaptation) techniques improve large language models’ adaptation to custom data, reducing memory usage and training time. They enable efficient fine-tuning while retaining existing knowledge, vital for practical applications in various domains.

- Tools technologies used: Python, Visual studio Code
- Specialized in fine-tuning Large Language Models (LLMs) and prompt engineering techniques, significantly enhancing performance metrics. Demonstrated expertise in tailoring models for specific tasks, showcasing a deep understanding of natural language processing and machine learning methodologies.

- Tools Technologies Used: Python, PandasAI
- Developed an AI-powered chat system that interacts with CSV (Comma-Separated Values) files. Leveraging the capabilities of Pandas, the system facilitates seamless communication and data retrieval from CSV datasets. Expertise includes integrating natural language processing with Pandas functionalities, creating an intuitive and efficient way to query and analyze tabular data through conversation.

- Tools technologies used: Google MAPS API, Deep Learning , Python
- Developed a traffic congestion ratio estimation system utilizing the Google Maps API for data collection. Predictions are made using deep learning techniques, enhancing transportation planning and management efficiency for urban areas.

- Tools technologies used: OpenCV, Python
- Developed a sign language detection system with OpenCV, utilizing video input to identify hand gestures and convert them into text. Evaluation will assess its accuracy in recognizing diverse sign language gestures.

POSITIONS OF RESPONSIBILITY

- **Teaching Assistant**, Pandit Deendayal Energy University, Gujarat
 - **Research Assistant**, Pandit Deendayal Energy University, Gujarat
- Aug 2022 - Jun 2023

Oct 2022 - Jun 2023

ACHIEVEMENTS

- **Acceptance of a paper:**”Optimizing the Parameters of Fluidized Bed Dryer”at IEEE I2CT-2024
 - **Presented a poster** on”Fine-Tuning LLMs and Prompt Engineering: Enhancing the Performance” at the IGNITE Event of IEEE
- Mar 2024

Mar 2024

CERTIFICATES

- **IEEE IGNITE:Participants**
 - **IEEE IGNITE: Poster Presentation**
 - **GeeksforGeeks Generative AI Python Workshop**
 - **DeeplearningAI Machine Learning**
 - **DeeplearningAI Unsupervised Learning, Recommenders, Reinforcement Learning**
 - **DeeplearningAI A Advanced Learning Algorithms**
 - **DeeplearningAI Supervised Machine Learning: Regression and Classification**
 - **NVIDIA Fundamentals of Deep Learning**
- Mar 2024

Mar 2024

Feb 2024

Aug 2023

Aug 2023

May 2023

Apr 2023

Feb 2023