# Aditya Khamitkar

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in LinkedIn

GitHub

#### **EDUCATION**

### Vellore Institute of Technology, Bhopal

Oct 2022 - Present

Master of Technology (5 Year) in Computer Science and Engineering (Computational and Data Science) Space Central School

May 2021

 $Class\ XII$ 

94.4%

Experience

Soul AI Jan 2025 - Present

AI Model Trainer & Evaluator

Remote

- Contributed to the development and enhancement of Gemini (Bard) through active participation in large-team projects like Project Shield and Project Bluebird.
- Utilized Python and RLHF methodologies to refine prompts and correct model outputs, specifically improving Gemini's accuracy in Python, Math, and Data Science applications.
- Engaged in collaborative efforts to train and validate AI models, including foundational work for upcoming Financial RAG models, ensuring robust and reliable performance.

Jan 2025 - Present Outlier AI

AI Training Specialist

Remote

- Orchestrated the improvement of large language models (LLMs) across multiple projects, including Jellyfish Rubrics and Vibrant Clownfish, by developing detailed rubrics and iteratively refining AI-generated responses for quality and relevance, particularly in code generation.
- Enhanced the accuracy and complexity of AI-driven solutions for SWEAP problems through Hyperion Augmentation, adding critical details to problem sets.
- Contributed to the evaluation and refinement of state-of-the-art LLMs, including Hopper V2 and Mighty Moo, by analyzing model outputs, providing critical critiques, and challenging model capabilities with complex queries, often involving multimodal data.
- Actively engaged in prompt engineering and answer correction for ChatGPT, specializing in Python, Math, and Data Science domains, ensuring high-quality and accurate model outputs.

# Satish Dhawan Space Centre (ISRO)

Oct 2024 - Nov 2024

Data Science and AI/ML Engineering Intern

Sriharikota

- Analysed telemetry data from 20+ PSLV rocket launches, focusing on signal strength and flame attenuation, and applied AI methodologies to enhance mission safety and operational efficiency across 80 individual stages.
- Developed and implemented predictive models and visualizations to identify signal degradation and interference patterns, enabling proactive safety measures throughout the four stages of the PSLV launch process.
- Applied advanced ML techniques and statistical modelling on signal integrity, resulting in a 15% reduction in signal issues during critical flight phases, improving signal clarity by 25% and predictive accuracy by 20% in simulated PSLV launch environments.

# Intel Corp and Electronics and Information Technology

Mar 2021 - Oct 2021

Intel AI 4 Youth Trainee

Remote

- Collaborated with Intel AI experts to design "Doctor Bot", an AI-powered virtual healthcare assistant, improving accessibility and efficiency in patient care.
- Achieved finalist distinction from over 52,000 participants in a prestigious nationwide AI challenge, demonstrating advanced machine learning expertise and innovative data processing solutions.

#### Projects

#### LunaXplore

Python, OpenCV, DL, Image Processing, GANs, Retinex Theory, Tensor Flow, Horus Algorithm (GitHub)

• LunaXplore enhances low-light images from the PSR regions of lunar craters to improve signal-to-noise ratio (SNR). By applying advanced deep learning and image processing techniques, the project creates high-resolution image maps from Chandrayaan-2's OHRC, aiding lunar landing site selection and supporting geomorphological studies of the lunar pole.

#### AgriSatAI

Python, Image Processing, Remote Sensing (GitHub)

• Leveraging AI and satellite data to optimize agriculture and irrigation systems for sustainable farming. Features real-time crop health monitoring, water usage optimization, and yield prediction models.

# SKILLS

Expertise: Artificial Intelligence & ML: Deep Learning, Neural Networks, Generative AI (Gen AI), GANs, Natural

Language Processing (NLP), Data Modelling, Remote Sensing, Image Processing, Project Planning

Languages: English, Hindi, Marathi, Telugu

Frameworks: TensorFlow, Keras, PyTorch, NumPy, Pandas AWS, Azure, Apache Kafka, Hadoop

Tools: Python, Java, C++ MongoDB, SQL, MySQL Advanced Excel, Tableau, Power BI

Professional: Data Engineering, Data Science, Software Development, Data Analytics, Machine Learning and AI

Engineering, Open Source Development

# CERTIFICATIONS & ACHIEVEMENTS

• IBM AI Engineering Professional Certificate, IBM (Link)