

VISHU KALIER

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EDUCATION

- **Integrated Masters of Technology in Computer Science and Engineering** (2021 - 2026)
Specialisation in Artificial Intelligence and Machine Learning
Cumulative GPA - **9.21**, VIT Bhopal University, Bhopal, M.P.
Available for full-time oppourtunities from June, 2025 (NOC from University available)
- **XIIth**, Percentage - **81.7**, St. Mary's Academy, Meerut Cantt., Meerut, U.P. (2019 - 2020)
- **Xth**, Percentage - **93.4**, St. Mary's Academy, Meerut, U.P. (2017 - 2018)

WORK EXPERIENCE

National Remote Sensing Center, ISRO (September, 2024 - October, 2024)
Deep Learning Engineer *Hyderabad, India (On-site)*

Solar Energy Estimation and Quantification of Solar Panels in Urban Areas

- Overhauled **image segmentation** using **5+ algorithms**, sharpening solar panel detection by **40%**.
- Accelerated **model training** using **12+** neural networks, leveraging data segmentation to **83%**.
- Implemented bounding box detection across **100+** types of solar panels, increasing detection by **80%**.

Omdena (March, 2023 - June, 2024)
Chapter Lead *Berlin, Germany, (Remote)*

Multimodal Analysis of Pneumonia

- Architected **fine tuning** and **feature extraction** on **35k+** images, leveraging accuracy to **78%**.
- Developed **10+ dense networks**, improving model accuracy by **35%** thereby, upgrading reliability.
- Streamlined model variables from **150** to **44** by developing **20+ data pipelines**, boosting **parallelism**.

PROJECTS

Collab Sphere, An Automated Team Management, Collaboration and Workflow System

- Built system that allocates employees among **8+** teams via **resume** parsed by **Google document API**.
- Transformed **team allocation** and matching algorithms by **30%**, coordinating employees to relevant roles.
- Optimized chat workspace and task grouping, by utilising **CI/CD Pipelines** escalating performance by **80%**.
- Integrated **report generation** to extract data of **8+** groups and **100+** tasks, improving transparency by **30%**.

Nova Elite, A Customizable Hybrid Database Model for Flexible Data Management

- Condensed all schema under **4 composite storages**, upscaling throughput by **40%**, reducing latency by **50%**.
- Designed **8+** microservices allowing **12k+** request calls per second, upgrading query optimization to **30%**.
- Enhanced transaction management, leading to data consistency by **80%** and conflict resolution drop of **55%**.
- Scaled the robustness by **event capturing** and **vectorized execution**, augmenting maintainance to **30%**.

SKILLS

- **Tech Stack:** **Artificial Intelligence**, Microservices, Software Development, Database, Machine Learning
System Design, **Springboot**, **AWS**, **Data Structures and Algorithms**, **SDLC**, **Agentic-AI**
- **Languages:** **Java**, **Python**, Google Cloud, **SQL**, **Mongo**, **Angular**, **C++**, **Node**, **React**, **Tensorflow**

EXTRA-CURRICULAR ACTIVITIES

- Led a team of **15+** members as Head of Research in Blockchain Club, increasing member participation by **40%**.
- Ranked **top 1%** coders on Leetcode and **Expert (blue)** on Codeforces, thereby solving diverse **1500+** problems.

CO-CURRICULAR ACTIVITIES

- Displayed strategic decision making and planning by winning **2+** district **Chess tournaments** in senior division.
- Spearheaded **4+** Debates by crafting directed arguments, gaining recognition as a **influential communicator**.