# Varun Vilvadrinath

😱 github.com/varunvilva 🛅 linkedin.com/varunvilva 💌 varunvilva1208@gmail.com 🏶 Portfolio

#### EDUCATION

### Indian Institute of Technology (IITM), Madras

2022-2025

Bachelor's of Science in Data Science and Programming

CGPA: 8.78, SGPA: 8.77

# Indian Institute of Information Technology (IIITV), Vadodara

2021-2025

Bachelor's of Technology in Computer Science Engineering

CGPA: 8.71, SGPA: 9.40

#### EXPERIENCE

#### SDE Intern | Jio Platforms Limited

May'24 - Aug'24

- Deep dived into backend architectures of multiple softwares.
- · Developed a event driven Notification Microservice platform with cross-application support with Azure EventHub and Kafka.
- · Implemented asynchronous task processing with Celery to handle high API request volumes.
- · Implemented robust backend architectures, prioritizing fault tolerance and resilience, adhering to agile principles for efficient development and delivery

#### Teaching Assistant | Course: Linear Algebra

Jan'24 - May 24'

- Conducted weekly quizzes for the class to assess understanding and progress.
- · Helping first year students to get through important concepts in Linear Algebra.
- Helping students with projects related to Linear Algebra.

#### Flask Backend Intern | ComputeLib

Oct'23 - Apr'24

- Developed microservices for E-commerce website using Flask and FastAPI.
- Developed microservices for cross platform data translation.
- · Developed microservices from scratch, fostering a deep understanding of scalable solutions and best practices for building efficient and maintainable systems.

#### **PROJECTS**

## MISAHUB-Challenge | Python, Tensorflow, Deep Learning, Image Processing

Jan'23

- Image Detection challenge on endoscopy images.
- · Incorporated models like U-Net and YOLOv8 for better results.
- · Maximised classification metrics of Precision, Recall and F1Score to 0.99
- · Best IoU achieved 0.44

# Visualizing Dynamics of Federated Medical Models via Conversational Memory Elements

Oct'23 - Apr'23

- Engaged in collaborative research focused on exploring Federated Learning methodologies
- · Particular emphasis on interpretations, incorporating conversational memory elements
- · Research paper accepted in International Conference on Pattern Recognition, 2024

# Project Collaborator - ISRO Safe Ship Navigation | Advisor: Prof. Pratik Shah, IIITV · Implemented entire backend of the application in Flask Python.

May'23 - Present

- · Helped and implemented crucial algorithms like A\*. · Developed ETL pipeline using Apache Nifi

## Achievements

# Google Gen Al Exchange Hackathon | Winner iSPIRIT track

Oct'24

- Aarthik Setu- an online lending platform (OCEN compliant) for ease of credit access to MSMEs.
- Built backend system in Golang with NoSQL database.
- · Used langchain and pinecone in Golang for GenAl capabilities on the platform.
- · **(#)** Aarthik Setu

# **Build For Bharat Hackathon** | Runners-Up

May'24

- Built a GenAl tool, multi-lingual and multi-modal for MSMEs across India to help them catalogue their inventory.
- · Secured top 6 among 43 teams nation-wide and invited to pitch in Google, Banglore to investors.
- $\cdot$  Secured Runner-Up(Second) Price in this track.
- · Won 3500\$ and 100K\$ worth Google Cloud credits
- · 
  Shelfie

#### TECHNICAL SKILLS

C, Java, Python, Pandas, Numpy, TensorFlow, Pytorch, OpenCV, Machine Learning, Deep Learning, MATLAB, Git/GitHub, VS Code, Postman APIs, Excel, PowerBI, Tableau, Flask, VueJs, NodeJs, Docker, ELK Stack, Kafka, Go-Gin/Fiber, FastAPI