# Vansh Raja

+91 70219 54565  |  vanshraja32@gmail.com  |  [vanshraja.me](http://vanshraja.me)

## ACADEMIC QUALIFICATION

**Bachelor of Engineering in Computer Science with specialization in AI and ML,** Vellore Institute of Technology, Bhopal, India; Aggregate/CGPA: 8.87/10; Jul'25

## INTERNSHIPS

### Data Analyst Intern, PreProd Corp, Bangalore                                              [Nov '23 – Jan '25]

PreProd Corp is an **AI Startup** that empowers individuals and businesses to build sustainable AI through upskilling, consulting, and product innovation.

- Designed and implemented an end-to-end MLOps pipeline using Kafka, DVC, MLflow, PySpark          *[Nov '23 – Feb '24]*
  and Scikit-Learn for a Food Demand Forecasting project.
- Contributed to PreProdCorp's Opensrc' initiative by developing demo projects using tools like          *[Mar '24 – Jul '24]*
  PySpark, RAG, GAN, MobileNet, Redis, and CouchDB.
- Designed, organized, and executed the 2-day "Buildathon" Hackathon at VIT Bhopal; developed          *[Aug '24]*
  the MVP for the AutoML app demo, mentored participants, and assisted in evaluating final submissions.
- Led 20 interns across 6 teams as **Team Leader**, guiding the development of 30+ demo projects          *[Aug '24 – Jan '25]*
  under the PreProdCorp Opensrc' initiative using PySpark, Pandas, Polars, CV, RAG, and GANs.
  Acted as Scrum Master, conducting sprint meetings, ensuring timely delivery, and promoting MLOps best practices.

**Tools Used:** PowerBI, Tableau, Apache Kafka, Spark, PySpark, Scikit-Learn, DVC, SQLite, MongoDB, Redis, MLFlow, Flask, Pandas, NumPy, and Pickle.

## PROJECTS

### Food Demand Forecasting *[https://github.com/Vansh-Raja/Food-Demand-Forecasting]*                [Nov '23 – Feb '24]

Designed a time-series model to forecast food demand with high accuracy. Implemented an MLOps pipeline to enhance project efficiency. The model significantly improved food demand prediction accuracy, optimizing inventory management and reducing food wastage.

**Tools Used:** PowerBI & Tableau, Apache Kafka, Spark & PySpark, Scikit-Learn (SkLearn), DVC (Data Version Control), SQLite, MongoDB, MLFlow, Flask, Pandas, NumPy, PyMongo, Pickle

### Calpred *[https://github.com/Vansh-Raja/CaloriePredictionProject]*                [Nov '23 – Jan '24]

Developed a calorie prediction system to estimate calories burned from workout data using machine learning. Built an easy-to-use interface that provides real-time tracking and insights, helping users monitor workouts, track progress, and stay on top of fitness goals.

**Tools Used:** Flask, SQLite3, Plotly, Dash, Pandas, NumPy, Matplotlib, XGBoost, TPOT, Seaborn, Gunicorn, HTML CSS

### CozyReader *[https://github.com/Vansh-Raja/TheCozyReader]*                [Apr'24 - May'24]

Created an AI-based bedtime storyteller that generates personalized audio stories using custom characters, themes, and voices. Delivered a user-friendly platform that makes bedtime routines more engaging and interactive through tailored audio narrations.

**Tools Used:** Google Generative AI API, Various TTS models from HuggingFace, CouchDB, Python, Streamlit

## AWARDS & ACHIEVEMENTS & CERTIFICATIONS

- Awarded the **1st place** in the Electronics Technical Quiz at the XPOTECH event organized by VITronix, VIT Bhopal, Feb'24
- "Privacy and Security in Online Social Media" by NPTEL, Apr' 24
- "Artificial Intelligence and Machine Learning", by Google Developers and SmartInternz, Nov'23
- "Applied Machine Learning in Python" by University of Michigan, Feb' 23

## WORKSHOPS

Attended a 2-day **MLOps Fundamentals Workshop** by Krishnav Dave (CEO PreProdCorp) in Bangalore; covered pipeline architecture, developer roles, and key industry tools, Oct '24.

## TECHNICAL SKILLS

**ML Frameworks:** Python, Scikit-learn, TensorFlow, PyTorch, H2O AutoML, PyCaret
**NLP & CV:** Transformers, LangChain, GANs, MobileNet, CV Pipelines, TPOT
**MLOps & Data:** MLflow, Docker, FastAPI, PySpark, Kafka, MongoDB