Vishwa R

vishwa0r1@gmail.com | +91-7708690518 | linkedin.com/in/vishwar | github.com/vishwar | Portfolio

Education

Coimbatore Institute of Technology — Coimbatore, India
M.Sc Decision and Computing Sciences – CGPA: 7.9/10 — *November 2021 – Present*

Experience

Data Science Intern — July 2024 – August 2025
Prediscan Medtech — *Chennai, India*

- Directed data research to develop predictive models for cholesterol risk assessment, enhancing diagnostic accuracy and reducing reliance on invasive testing methods.
- Engineered data-driven biomarker extraction strategies that enabled high-precision cardiovascular risk evaluation, significantly strengthening clinical decision-making and outcome prediction.
- Designed and streamlined automated data preprocessing workflows for 6,000+ records, improving data consistency, accelerating feature extraction, and enhancing model readiness.

Projects

Automated GitHub PR Review Agent | *Python, LangChain, FastAPI, Firestore*

- Led end-to-end design of an automated pull-request review system that reduced average PR review time from 45 minutes to under 5 minutes through multi-perspective AI evaluation and structured orchestration logic.
- Engineered a scalable review pipeline capable of processing large diffs (10k+ lines) by implementing deterministic chunking, prioritization, and multi-agent analysis, increasing review coverage consistency by over 80%.
- Implemented a full production life cycle including authentication, rate-limit protection, error-tolerant processing, and persistent review history, enabling reliable multi-user operation with near-zero failure rates under load.

Loan Approval Prediction | *Python, Pandas, Matplotlib, Seaborn*

- Quantified portfolio credit risk by analyzing 91k+ applicant records and isolating high-impact predictors of default, elevating decision confidence for loan approval screening.
- Synthesized diverse borrower attributes into actionable insights, clarifying approval drivers across income ratios, interest tiers, and credit history length for leadership reporting.
- Optimized approvals with a cross-validated AUC of 0.966, strengthening decision accuracy across segments and enabling reliable probability-based loan decisions.

HR Attrition Prediction System | *Python, Flask, Plotly, Dash*

- Preprocessed and standardized IBM's HR dataset to enhance data quality and support reliable workforce analysis.
- Performed in-depth exploratory analysis and statistical assessments, revealing a 16.12% overall attrition rate and cross-departmental variations.
- Designed dynamic visual dashboards to highlight attrition by income, age, tenure, promotions, and job satisfaction, driving data-informed decision-making.

Technical Skills

Programming: Python, R, SQL
Frameworks: Pandas, NumPy, Scikit-learn, TensorFlow, PyTorch, Matplotlib, spaCy, Beautiful Soup, LangChain
Web Development: Django, Flask, FastAPI
Databases & Cloud: MySQL, MongoDB, Google Cloud Platform
Tools : Microsoft Excel, Microsoft Power BI, Tableau, Jupyter Notebook, Google Colab,GitHub

Soft Skills

Flexible | Curiosity & Innovation | Continuous Learning | Cross-functional Collaboration

Certifications

Udemy: Machine Learning A-Z: AI, Python & R

Udemy: Microsoft Power BI Desktop for Business Intelligence