Priyanshu Tiwari

AIML Student

Bangalore|techarena955@gmail.com | GitHub | **LinkedIn**

Education

Kendirya Vidyalaya **Grade:- 1st class**
pcmcs 10+2 2010 - 2022

Sir M Visvesvaraya Institute of Technology **CGPA 8.00**
Artificial Intelligence and Machine Learning (B.E) 2022 - 2026

Skills

Programming Languages:	C, C++, Python, R, Scala
Libraries/Frameworks:	Machine Learning, Deep Learning, Agent-based Model, API, Pandas, Matplotlib, Seaborn, OpenCV, Mediapipe
Tools / Platforms:	Git, VS Code, Jupyter, PyCharm
Databases:	MySQL, NoSQL

Experiences

DRDO – Microwave Tube Research & Development Centre (MTRDC) **Nov 2024 – Dec 2024**

- Conducted research on machine learning applications for predicting and controlling the frequency of Traveling Wave Tubes using a Feedforward Neural Network (FNN).
- Developed models to enhance the precision of frequency control mechanisms in advanced communication systems.
- **Certificate Link:** Certificate

Unboxing Community **Sep 2024 – Nov 2024**

- Worked as a Machine Learning Researcher, developing a recommendation system for an e-commerce platform.
- Implemented collaborative filtering and deep learning techniques to improve personalized product recommendations and user experience.
- **Certificate Link:** Certificate

DRDO – Centre for Artificial Intelligence and Robotics (CAIR) **April 2024 – May 2024**

- Worked on NLP-based research focusing on "Transformer-Based Text Summarization for News Articles."
- Developed an AI-driven text summarization model to generate concise yet informative summaries of long-form news content.
- Leveraged transformers and deep learning models to improve summarization efficiency and accuracy.
- **Certificate Link:** Certificate

Girl Script Summer of Code 2024 **May 2024 – August 2024**

- Actively contributed to several open-source projects under Girl Script Summer of Code 2024.
- Showcased technical expertise in machine learning and deep learning, leading to recognition as a top performer in the program.
- Achieved All India Rank (AIR) 98 in the Machine Learning and Deep Learning domain.
- **Certificate Link:** Certificate

Research Projects

Bone Loss Detection on X-Ray Teeth |Link| **Dec 2023 - Aug 2024**

- Worked on a research project with Krishnadevaraya College of Dental Sciences & Hospital.

Combinational Health Model |Link| **May 2024 - Sep 2024**

- Developed a multi-disease prediction model under the guidance of Dr. Soumya Pati.

CBCT 3D Visualization Software with Mesh Mode |Link| **Dec 2023 - Feb 2024**

- Worked on a second research project with Krishnadevaraya College of Dental Sciences & Hospital.

Plant Disease Detection |Link| **May 2024 - May 2024**

- Collaborated on a PhD thesis and publication with Associate Professor Vijay Lakshmi.

Application of Artificial Intelligence in Friction Stir Welding |Link| **Feb 2024 - Feb 2024**

- Assisted on a project with Dr. Prashant. Utilized an Artificial Neural Network (ANN) model to predict laboratory test outcomes with an accuracy of 88%.

Hedging of Financial Derivatives (Open Source project) |Link| **May 2024 - Aug 2024**

- Completed 200 open-source projects based on machine learning and deep learning in financial analytics, stock prediction, and real estate prediction. Developed several web applications as part of the projects.

Research Publications

Optimizing FAANG Stock Forecasting – The Power of Feature Engineering and LSTM in Financial Analysis

- Conducted research on Meta, Apple, Amazon, Netflix, and Google (FAANG) stocks, integrating sentiment analysis to improve stock prediction accuracy.
- Presented at IEEE 5th International Conference on Artificial Intelligence and Data Engineering.
- **Certificate Link:** Presentation Certificate

Enhancing Fare Prediction Accuracy in Ride-Hailing Through Neural Networks and Data Simulation

- Developed an ML-based fare prediction model for Ola and Uber, incorporating rain-time surge analysis for improved pricing predictions.
- Presented at IEEE 5th International Conference on Artificial Intelligence and Data Engineering.
- **Certificate Link:** Presentation Certificate

GIS-Based Urban Traffic Simulation Using Mesa Framework Springer Conference

- Simulated urban traffic congestion using the Mesa agent-based modeling framework and OSMnx for road network extraction.
- Modeled real-world Bangalore traffic scenarios and visualized congestion patterns using animation-based insights.
- Presented at Springer 2nd International Conference on Computing Science and Artificial Intelligence.
- **Certificate Link:** Presentation Certificate

Dynamic Stability Classification in Smart Grids Using Feedforward Neural Networks

- Addressed stability control challenges in smart grids due to increasing reliance on renewable energy and prosumer-driven services.
- Proposed an FNN-based model for predicting dynamic grid stability in a four-node star configuration.
- Presented at Springer IEI Journal (Q3) – International Conference on Sustainable Technology.
- **Certificate Link:** Presentation Certificate

Certifications

- Advance Your Skills in Deep Learning and Neural Networks - **LinkedIn**
- Learning Relational Databases - **LinkedIn**
- Foundations of Cybersecurity - **Coursera**
- Leveraging Cloud-Based Machine Learning on Azure: Real-World Applications - **LinkedIn**
- AI Workshop: Build a Neural Network with PyTorch Lightning - **LinkedIn**
- Problem Solving (Intermediate) - **HackerRank**

Honors & Awards

- Received an appreciation letter from **Dr. Prabhuji MLV**, Professor and Head of the Department of Periodontology at Krishnadevaraya College of Dental Sciences and Hospital, for my research project.
- Honoured with 2X Top voice from **LinkedIn**
- Achieved Rank 1 globally in Python on **HackerRank.**
- Letter of Appreciation from **Dr. Vani Priya**, HOD of MCA Dept, Sir M Visvesvaraya Institute of Technology
- Letter of Appreciation from **Dr. Prashant H**, Associate Professor of Mechanical Dept, Sir M Visvesvaraya Institute of Technology
- Excellence Award in Machine Learning from **Aqmenz Automation Private Limited**
- **NCC A, B, C** Certificate holder with 2 All India Level Awards