

APEX ARYAN DAS

+917008584419 | apexrx@proton.me | [linkedin.com/in/apexrx](https://www.linkedin.com/in/apexrx) | github.com/apexrx | <https://tinyurl.com/paxrx>

EDUCATION

VIT Bhopal University

Bachelor of Technology (B.Tech) in Computer Science & Engineering

Expected 2026

Madhya Pradesh

Mother's Public School

Senior Secondary (Class 12) – CBSE, Percentage: 86.9%

July 2022

Bhubaneswar, Odisha

DAV Public School, JA

Secondary Education (Class 10) – CBSE, Percentage: 94.6%

March 2020

Talcher, Odisha

TECHNICAL SKILLS

Programming Languages: C++, Java, Python, JavaScript, HTML, CSS, Rust, SQL

Machine Learning & AI: TensorFlow, PyTorch, Scikit-learn, OpenCV, Deep Learning, Neural Networks, CNN, LSTM, RNN, Computer Vision, Natural Language Processing, Feature Engineering, Model Optimization

Data Science & Analytics: Pandas, NumPy, Matplotlib, Seaborn, Data Preprocessing, Time-Series Analysis

Cloud & DevOps: AWS, Docker, CI/CD, Cloud Architecture, RESTful APIs, Microservices, FastAPI, API Development

Development & Tools: Git, GitHub, Postman, Ngrok, Linux, Software Development Life Cycle, Agile Methodology

Databases & Systems: MySQL, System Architecture, Object-Oriented Programming, Data Structures, Algorithms

PROJECTS

FAILURE FORECASTING IN IOT USING LSTM AUTOENCODER + LSTM | [GitHub](#) | [Python](#), [TensorFlow](#)

February 2025

- Engineered a two-stage deep learning pipeline using LSTM autoencoders for IoT predictive maintenance.
- Architected advanced anomaly detection algorithms, achieving 99.69% accuracy via threshold-based classification.
- Designed robust preprocessing for multivariate data, boosting model performance by 25% and reducing false positives by 40%.

FULL-STACK AI APPLICATION FOR AGRICULTURAL INSIGHTS | [GitHub](#) | [FastAPI](#), [TensorFlow](#)

April 2025

- Developed an agricultural intelligence platform for crop recommendation, fertilizer optimization, and disease detection.
- Architected a FastAPI REST API with microservices, enabling real-time analysis and cutting response time by 60%.
- Engineered a CNN for disease detection achieving 95% accuracy, integrated with real-time recommendation systems.

HIGH-PERFORMANCE HTTP DOWNLOADER (GATOR) | [GitHub](#) | [Rust](#), [Tokio](#), [Async Programming](#)

September 2025

- Developed a concurrent HTTP downloader in Rust, leveraging async programming for 10x faster download speeds.
- Engineered intelligent chunked downloading and load balancing, reducing large file download times by 75%.
- Architected memory-efficient streaming and error recovery, ensuring 99.9% download success with resumable functionality.

ENSEMBLE MODEL FOR DETECTION OF SICKLE CELLS IN RBC SAMPLES | [GitHub](#) | [Python](#), [TensorFlow](#)

March 2024

- Engineered a hybrid ensemble system combining DNNs and KNN for automated sickle cell detection.
- Achieved 98.5% classification accuracy via advanced feature extraction, hyperparameter tuning, and ensemble voting.
- Designed a robust pipeline for 7,000+ images, leveraging augmentation and cross-validation, reducing model overfitting by 20%.

CERTIFICATIONS

AWS Solutions Architect - Associate Certification Program

Ethnus (Codemithra)

April 2025

Online

Industrial IoT Markets and Security

University of Colorado Boulder (Coursera)

November 2024

Online

The Bits and Bytes of Computer Networking

Google (Coursera)

December 2023

Online