ARSHAVI ROY

arshaviroy@gmail.com | +91-8274069878 | LinkedIn | GitHub

EDUCATION

Narula Institute Of Technology, Agarpara, Kolkata *Aug 2022-Jun 2026*

- *B.Tech in Computer Science and Engineering*
- CGPA: 9.00/10 (upto 4th sem)
- **Relevant Coursework:** Operating System, Data Structures and Algorithm, Discrete Maths, Design Analysis of Algorithm, Machine Learning, Object-Oriented Programming

Uttarpara Girls' High School [WBCHSE] *2020-2022*

- Percentage: 94%

Patha-Bhavan Dankuni [WBBSE] *2018-2020*

- Percentage: 96.14%

SKILLS

Languages: C/C++, Java, Python, HTML5, CSS3, JavaScript
Frameworks: Next.js, TensorFlow/Keras, PyTorch, scikit-learn, Three.js
Libraries: Pandas, NumPy, Matplotlib, XGBoost
Cloud/Database: AWS (S3, Lambda, CloudFront), MongoDB Atlas
Machine Learning: Deep Learning, AI Model Development, Risk Assessment Models
Development Tools: Git, GitHub, VS Code, Kaggle, Jupyter Notebook, Google Colab
Soft Skills: Project Management, Team Leadership, Technical Communication

PROJECT WORK

Finergize - Financial Inclusion Platform For Rural India (Ongoing) **GitHub** *Nov 2024 - Present*

- Implemented scalable microfinance platform using Next.js, MongoDB Atlas & Polygon blockchain, enabling digital banking & micro-loans for rural communities
- Integrated ML-based loan assessment system achieving 95% accuracy using XGBoost, featuring real-time analytics & automated risk monitoring
- Developed a secure digital wallet system with biometric authentication, processing over 1000+ daily transactions with 99.9% uptime
- Implemented a peer-to-peer lending marketplace with smart contracts, enabling transparent and secure financial transactions
- Created a mobile-first responsive UI with offline capabilities, increasing rural user engagement by 60%
- **My Contributions:** Designed and implemented the loan API guidance model using XGBoost and Random Forest for intelligent loan recommendations; Built the automated loan approval system with 95% accuracy using ensemble learning techniques; Developed the blockchain-based transaction system
- Tech Stack: Python, Next.js, MongoDB, Blockchain, Machine Learning, React, Node.js, TailwindCSS

Virtual Herbal Garden **GitHub** *Sept - Nov 2024*

- Built an interactive Virtual Herbal Garden using Next.js, Three.js, and MongoDB Atlas
- Integrated AWS S3, CloudFront, and Lambda to serve and process 3D models dynamically
- Developed an AI-based plant recognition system and chatbot for plant identification and assistance with 98% accuracy score
- Created a comprehensive platform offering e-commerce for plant-based products, expert consultation on medicinal plants, and user-generated blogs for educational insights
- **My Contributions:** Led the development of AI chatbot using GPT-3.5 for plant care guidance; Implemented CNN-based plant recognition model with 98% accuracy; Designed and developed backend architecture using Node.js and MongoDB
- Enhanced UX with WebGL-based 3D models and real-time data integration [Demo]

ACHIEVEMENTS/CERTIFICATES

- Max rating 1666 (top 15.59%) 180+ problem solved in LeetCode
- Machine-Learning Specialization by collaboration of Stanford Online and DeepLearning.AI — *Credentials*
- IIT Kharagpur AI4ICPS Certificate Programme — *Credentials*
- Object-Oriented Data Structures in C++ — *Credentials*
- Web Development course by Internshala — *Credentials*
- Complete A.I. and Machine Learning, Data Science Bootcamp — *Credentials*