

# Samprikta Sarkar

+91 7842510495 | [samprikta-sarkar2032@gmail.com](mailto:samprikta-sarkar2032@gmail.com) | [linkedin.com/in/samprikta-sarkar-64075928a](https://linkedin.com/in/samprikta-sarkar-64075928a) | [github.com/Samprikta05](https://github.com/Samprikta05)

## EDUCATION

### Vellore Institute Of Technology, Chennai

*Bachelor of Technology - Computer Science and Engineering*

Aug, 2023 - Present

*Chennai, IND*

### Narayana Junior College

*Telangana State Board of Intermediate Education*

April, 2021 - March, 2023

*Hyderabad, IND*

## PROJECTS

### GreenShere | *FastAPI, PostgreSQL, Google Maps API*

February, 2025 – Present

- Developing APIs for carbon calculator and eco-tips, using PostgreSQL for storage.
- Built a tracker system for eco-actions, points, and leaderboards with JWT authentication.
- Integrated Google Maps API for locating eco-friendly stores and recycling centers.
- Creating a forum with posts, comments, and voting, plus a contact form for user inquiries.

### Cloud-Hosted Virtual Gardening Assistant | *Node.js, Firebase, AWS*

February, 2025 – Present

- Integrated OpenWeatherMap API to provide weather-based care recommendations for plants.
- Developing backend APIs with Node.js and Express, using Firebase Firestore and AWS DynamoDB for data storage.
- Implementing Firebase Cloud Messaging (FCM) for push notifications and reminders.
- Managed user authentication with Firebase Authentication for secure, personalized plant data access.

### Medical Title Generation Using Transformer | *Python, Hugging Face Transformers, PyTorch*

May 2024

- Developed a model to generate titles from medical research abstracts using transformer-based architectures (T5/BART).
- Preprocessed domain-specific text data and implemented tokenization for model training.
- Fine-tuned using PyTorch Lightning with cross-entropy loss and monitored BLEU scores for evaluation.
- Saved and deployed the trained model on Kaggle for generating accurate and concise medical titles.

## TECHNICAL SKILLS

**Languages:** Java, Python, C/C++, PostgreSQL, JavaScript, HTML/CSS, R, Flutter

**Frameworks:** React, Node.js, FastAPI, Express, FireBase

**Developer Tools:** Git, VS Code, Visual Studio

**Libraries:** pandas, NumPy, Matplotlib, PyTorch

## ACHIEVEMENTS

### Smart India Hackathon 2024 | *Finalist (Team ID: VITISH070)*

August, 2024 - September, 2024

- Selected nationally for developing SaveMyNode, a Linux file recovery tool targeting XFS and BTRFS systems.
- Contributed significantly to research, tool design, and secured wins in both internal university-level presentation and hackathon rounds.

## EXTRA CURRICULARS

### Fine Arts

- Selected nationally for developing SaveMyNode, a Linux file recovery tool targeting XFS and BTRFS systems.
- Won several medals and prizes in state and interschool art competitions.