

SUMMARY

Motivated and detail-oriented final-year B.Tech student in Computer Science and Engineering with hands-on experience in **Python, Machine Learning, IoT, and Remote Sensing**. Skilled in developing web applications using **Django and PHP with PostgreSQL and MySQL** databases. Experienced in implementing OCR and handwriting recognition projects. Strong problem-solving skills with a passion for coding, research, and innovative technology solutions.

EDUCATION

Degree	Institute	Board / University	CGPA/Percentage	Year
B.Tech CSE	Techno College of Engineering, Agartala	Tripura University	7.32 (Till 6th Sem)	2021-2025
Senior Secondary	Shishu Niketon HS school	TBSE	94.60%	2021
Matriculation	Shishu Niketon HS school	TBSE	89.00%	2019

EXPERIENCE

- **Internship at MIT SQUARE**

Python and NLP Intern

August 2023 - September 2023

Remote

– Developed a sentiment analysis tool using web scraping, Twitter API, and Python to analyze social media opinions.

– Extracted and classified tweets with NLP techniques, providing public sentiment insights; earned a certificate for completing the project during the August 2023 internship.
- **Internships at IIT Kharagpur**

IoT and Machine Learning Intern

January 2024 - February 2024

Kharagpur, West Bengal, India

– Gained hands-on experience in building and deploying IoT applications using Raspberry Pi and MQTT for efficient device communication.

– Integrated machine learning algorithms into IoT solutions for data analysis and prediction; deployed a supervised model on AWS, enabling system control with low-latency networks.
- **Database Internship - NIELIT Agartala (NECB 2.0)**

Database and Backend Development Intern

June 2024 - July 2024

Agartala, Tripura, India

– Contributed to NECB 2.0 by engaging in a database technologies internship to support IECT (Information and Communication Technology) training in the North East.

– Developed expertise in database optimization to enhance system performance for real-world applications; built and integrated scalable backend solutions using PHP for NECB 2.0 projects, gaining hands-on experience in backend development and database infrastructure.

PROJECTS

- **ShopCart - Django E-commerce Platform**

Mar 2023 - Jun 2023

– Built a functional e-commerce website using Django with features like product listings, shopping cart, secure payment gateway, and user authentication.

– Utilized HTML, CSS, JavaScript, and SQLite3 for front-end and back-end development.
- **Write2Digit AI - Handwriting Detection Machine Learning Model Project**

Sep 2024 - Running

– Developed a machine learning model to detect and classify handwritten characters, using a custom dataset and advanced algorithms to improve accuracy.

– Utilized Python, Keras, TensorFlow, OpenCV, Pyplot
- **Pdf2Audio - Python PDF to Audio Converter Project**

August 2023 - August 2023

– Developed a Python-based tool to convert PDF documents into audio files, utilizing libraries like PyPDF2 and GTTS for text extraction and speech synthesis, enhancing accessibility for visually impaired users.

– Utilized Python, PyPDF2, GTTS
- **Web-Based Complaint Registration System with Token Generation**

September 2022 - Jan 2023

– Developed a web application using PHP, HTML, CSS, and JavaScript that enables users to register complaints and automatically generates unique tokens for tracking and managing each complaint.

– Utilized PHP CodeIgnitor Framework, HTML, CSS, JS, Postgress DB

• **Web-Based News App with Social Features**

Jan 2025 - Running

- Developing a web-based news app with PHP framework Laravel incorporating social media features and prioritizing security through PHP OOP for robust data protection and user authentication. Users can read, share, comment, and discuss news articles.
- Utilized PHP Laravel, PostGres DB

TECHNICAL SKILLS

- **Programming Languages:** C/C++, Python, Java
- **Technologies :** Django, JSP, Servlets, PHP, JavaScript
- **Database Management:** MySQL, PostgreSQL, SQLite
- **Version Control :** Git, GitHub
- **Specialized Skills:** Web Scraping, Machine Learning, IoT Integration

TECHNICAL TRAINING

- **Remote Sensing Trainee at ISRO IIRS (Remote):**Extraction of satellite images to map land-cover and urban data for predicting environmental impact.
- **BSNL Network Infrastructure Training (On-site):**Successfully completed network infrastructure training at BSNL Agartala, earned a certification. Gained in-depth knowledge of network backbone operations, traffic handling mechanisms, various topologies, Optical Carrier Band (OCB), National Internet Backbone (NIB), broadband services, Fiber-to-the-Home (FTTH), and mobile transmission technologies.
- **Technical Training in IoT and Sensor Applications with NEILIT Agartala (On-site):**Completed technical training at NEILIT Agartala on IoT and its applications with sensors. Worked on a live project utilizing microcontrollers, Arduino boards, and IDEs to develop real-time IoT solutions, gaining hands-on experience in sensor integration and data processing. The project was conducted under the supervision of NEILIT Agartala.

CERTIFICATIONS

- **Certificate Name :** Advanced Certification in Python and Machine Learning from MIT Square London
- **Certificate Name :** Certificate of Completion in Remote Sensing and GIS Applications
- **Certificate Name :** Professional Certification in Machine Learning with Python and IoT Development

ACHIEVEMENTS

- **Achievement 1,** Awarded for creating a complaint registration system with tracking tokens. 2023
- **Achievement 2,** Secured second place in Coders Pro Challenge for improving data sorting efficiency. 2024