# Anindya Sen

Enayet Bazar, Chattogram, Bangladesh

# **Education**

#### Vellore Institute of Technology (VIT)

B.Tech. in Computer Science and Engineering

**CGPA:** 8.01/10.0

Vellore, Tamil Nadu, India

**Relevant Courses:** Applied Linear Algebra, Artificial Intelligence, Web Mining, Image Processing, Machine Learning, , Applications of Differential Equations, Parallel and Distributed Computing, Internet of Things, Human Computer Interaction, Digital Forensics, Information Security Management.

### **Research Interests**

Natural Language Processing
Data Mining

Machine Learning Computer Forensics Image Processing Computer Vision

# **Research Experience**

#### • Journal Publications

 Sarkar, S.S., Sen, A., Krishnamoorthy, A. et al. Route Planning Service for Emergency Vehicles with Increased Accuracy and Efficiency for Online Platforms. SN COMPUT. SCI. 3, 400 (2022). <a href="https://doi.org/10.1007/s42979-022-01289-5">https://doi.org/10.1007/s42979-022-01289-5</a>

Book Chapters

- Dey, K., Chowdhury, F. K., Sen, A., Arka, A. M., Chowdhury, O., Roy, H., & Rahman, M. Z. (2024).
   Graphene and its hybrid materials: Properties and applications. Reference Module in Materials Science and Materials Engineering. <a href="https://doi.org/10.1016/b978-0-323-96020-5.00214-4">https://doi.org/10.1016/b978-0-323-96020-5.00214-4</a>
- Undergraduate Final Semester Capstone Project
  - o **Title:** Decentralized Healthcare Network Platform
  - o **Supervisor:** Dr. Krishnamoorthy A.
  - O **Description:** Using state-of-the-art blockchain technology, we have built a totally decentralized system in which data is saved in our proprietary file system called IHFS, which is entirely protected from data security and integrity concerns.

#### Skills

- **Programming Languages:** Python, C, C++, Java, JavaScript,
- Frameworks and Libraries: Tensorflow, PyTorch, Keras, OpenCV, Numpy, Pandas, Scikit-learn, Django, Node.JS.

# **Projects**

- "Object" a Web Based Object Detection Site (Link)
  - (A Web based Object Detection system using TensorFlow.js)
- Offensive Language Identification System (Link)
  - o (A system for detecting offensive language in OffensEval (SemEval 2019 Task 6))
- Comparing word search technique between Sequential and Parallel Method
  - (*Language: C, OpenMP*)
- Real-time 3D Product Display and Demo using ARCore
  - O (Language: Java, implemented Augmented Reality (AR) in an Android App)
- Efficient Image Encryption Algorithm (*Language: Python*)

- Detection of Motorcyclists and Construction worker without Helmet from Live Surveillance Video
  - (Using Convolutional Neural Network(CNN): YOLO)
- Detecting and Tracking Irregular Objects Based on Their Shape and Color In Real-Time (Using OpenCV, NumPy)
- Smart Home Automation System (*Using 8086 microprocessor*)
- Garage Management System (Using the concept of Deadlock in Operating Systems)
- Pharmacy Management System (Language: Php, MySQL, HTML)
- Servo Motor Speed Monitor (Using Proteus for simulation and Blynk Server)
- Telemedicine and Monitoring App for Elderly People
  - (Designed the system architecture, Cost analysis, Marketing strategies and building a prototype of the android app for the course "Lean Start-up Management")

# **Activities**

• IEEE Power and Energy Society (IEEE PES), VIT Chapter Core Committee Member

Conducted Workshops on: Machine Learning, MATLAB.

o Represented in: Gravitas 2019 and Riviera 2019.

December 2018-December 2020

### **Achievements & Awards**

- Government Scholarship for Secondary School Certificate Examination
- Government Scholarship for Junior School Certificate Examination (2<sup>nd</sup> position in Chattogram Board)
- Achieved awards from various art competitions.

### **MOOCs and Certifications**

- Advanced Algorithms and Complexity (Link)
- The Arduino Platform and C Programming (Link)
- Fundamentals of Parallelism on Intel Architecture (Link)
- Essential of Machine Learning (<u>Link</u>)
- Logistics and Supply Chain Management (<u>Link</u>)
- Marketing Management (<u>Link</u>)
- Web Application Technologies and Django (Link)