TANMOY ROY

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Email me \(\rightarrow \) LinkedIn \(\rightarrow \) GitHub \(\rightarrow \) Personal Website

EDUCATION

Bachelor of Computer Science, Jadavpur University

Expected 2025

Higher Secondary Education, Barrackpore Govt High School

Achieved 91.8% (Jul 2018 - May 2020)

Secondary Education, Barrackpore Govt High School

Achieved 91.57% (Jan 2017 - Jun 2018)

SKILLS

iOS Development,

Deep Learning (custom trained YOLO models for vehicle path detection, object detection), Developed various DRONES, including a Quadcopter, an S550 Hexacopter, and a QAV250 Racing Drone using Pixhawk, Apm, and SpeedyBee flight controllers.

Languages: JAVA, PYTHON, swift, C++, C

EXPERIENCE

Internship: Intern at JUSense & Technology Pvt Ltd.

Role: Embedded Software and Hardware

Responsibilities: Developed stable-flying drones, diverse iOS apps with Firebase integration, and Streamlit web apps deploying deep learning models.

Other Experiences:

I am a tech enthusiast diving deep into Machine Learning, Deep Learning, Data Science, and AI, with a background from Jadavpur University. My primary experience lies in Deep Learning, with projects utilizing custom-trained YOLO models (YOLO v7, YOLO v8, YOLO NAS).

- Vehicle Path Detection and Counting: This system accurately tracks vehicle paths, aiding in traffic management and parking optimization. GitHub
- Autonomous Drone Project: Developed an autonomous drone equipped with cameras for deep learning analysis. The drone, built by me, is designed to carry up to 1 kg and has applications in surveillance, environmental monitoring, and more. YouTube
- Streamlit Web App: Implemented custom-trained deep learning modules in a Streamlit web app. Users can select from 80 object types in YOLOv8 and view detection results through images, videos, and live webcam feeds. GitHub

PROJECTS

LinkedLoop: A Social Media App (iOS Development) - The app leverages Google Firebase and Firestore for backend services and scalable storage. KingFisher manages image caching, while Authentication, UploadTweet, and Profile handle user functions and UI. MainTab provides navigation, Models define data structures, and Service manages networking. Simple frame-based animations are used to minimize app size and avoid extra dependencies. GitHub

Whisper: A Chat Application - Whisper is a user-friendly chat app designed for seamless communication. It uses Rive and Spline for animations, Firebase and Firestore for backend services and message storage, and SDWebImageKit for efficient image handling. The app offers streamlined authentication, messaging with history access, and easy logout, focusing on user convenience and data security. Explore its features in the video presentation. GitHub