# **Gourab Das**

RKM Vidyamandira, Belur Math, Howrah - 711202, West Bengal, India

#### About

I am a **UGC NET JRF and Assistant Professor Qualified** first-year Post-graduate student with interest in Machine Learning, AI and UAV Communication. I keep interest in solving real world problems. Recently, I proved my coding skills by securing First position in two Coding competitions at prestigious institutions.

#### Field of Interest

- · Machine Learning
- · Artificial Intelligence
- UAV Security

## Education \_\_\_\_\_

M.Sc Ramakrishna Mission Vidyamandira - University of Calcutta, CS	2024 – Present
• CGPA: 9.76/10 (93.6%) (Marksheet ☑)	
B.Sc. University of Delhi, CS	2020 - 2023
• CGPA: 9.23/10 (Mark-sheet ☑) Awards: First Rank Holder. (Certificate ☑)	
HSC Ramakrishna Mission Vidyapith, Deoghar - CBSE	2018 - 2020
<ul> <li>Percentage: 96.2 (Markssheet ☑)</li> </ul>	
SSC Sarada Vidya Mandir, Raiganj - CBSE	2018
• Percentage: 93.8 (Markssheet ☑)	

# Achievements \_\_\_\_\_

UGC NET Dec'24 - AIR 41 JRF & Assistant Professor (Scorecard ☑)	2025
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• Score: 202 out 300.

• Percentile: 99.8707644.

### Winner (First Position) - The Turing Show. (Perceptron, RKMVERI) (Certificate ☑) 2025

• Applied problem solving and optimization skills to win the **Coding Competition** organized by Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI).

## Winner (First Position) - Codeplay. (eXabyte, St. Xaviers, Kolkata) (Certificate ☑) 2025

• Applied problem solving and optimization skills to win the **Coding Competition** organized by St. Xavier's College (Autonomous), Kolkata.

## Sanjeev Arora Memorial Prize. (ARSD COllege, DU) (Certificate ☑)

• Excellent Academic performance in Graduation and College First Rank (Computer Science).

## Experience \_\_\_\_\_

#### **RKM Vidyamandira**, Research

Kolkata

2023

• Working on development and execution of algorithms and models in the field of Machine Learning and UAV Authentication.

2024 - Present

## **Publications** \_

### **Enhanced UAV Tracking through Multi-Sensor Fusion and Extended Kalman Filtering**

Dec 2024

Bodhisattwa Baidya, Atanu Mondal, Sarbajit Manna, *Gourab Das*, Anirban Santra, Arkaprava Chakraborty

DoSIER 2024 C Pdf C

## Projects \_\_\_\_\_

## HeartStack: A Multi-Layered Ensemble Model for Heart Disease Prediction

2025 - Present

• Developed a four layer stacked ensemble model that integrates various classifiers to predict heart disease with high precision. Utilized ensemble learning, model stacking, and majority voting, achieving strong precision and reliability on real-world data. Achieved better results than four recent proposed methods.

# Advanced Cryptographic Framework Using Hyperelliptic Curves and Particle Swarm Optimization for Secure UAV Communications

2025

• Developed a resilient cryptographic framework integrating Hyperelliptic Curve Cryptography (HECC) with Particle Swarm Optimization (PSO) to optimize AES key management for UAV communications. Enhanced security against attacks by dynamically adjusting key length and rotation intervals.

# Technologies \_\_\_\_\_

Languages: Python 12, C++, HTML5, CSS3, LaTeX, MATLAB.

ML and DS: Scikit-learn, Seaborn.

Tools: Jupyter, Google Colab, GitHub, Photoshop 2022.

# Certifications and Workshops \_\_\_\_\_

Next Generation Communication Technologies Using MATLAB Tools (Certificate) ☑ Feb 2025
Indian Institute of Information Technology Una

 Problem Solving (Intermediate)
 (Certificate) ☑

 HackerRank
 Feb 2025

# Volunteering \_\_\_\_\_

## PixElation - The Photography Society of ARSD. (Certificate ☑)

2021 - 2023

• Served as the **Public Relations Head** in PixElation, contributed to organizing Society Fest, NAAC visit, College Fest, Photo walks and Photography Sessions.

# References \_\_\_\_\_

#### Sarbajit Manna

Assistant Professor

Ramakrishna Mission Vidyamandira

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