# **Gourab Das**

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Pelur Math, Howrah - 711202, West Bengal, India



#### About \_\_

**UGC NET JRF** Qualified postgraduate student in Computer Science with research experience in Artificial Intelligence, IoT, Image Processing, and Machine Learning. Strongly inclined towards publication and academic research, with a focus on applying AI for societal advancement. Dedicated to interdisciplinary collaboration and impactful innovation.

#### Field of Interest \_\_\_\_\_

- Machine Learning
- Artificial Intelligence
- UAV Security

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

# Research Internship under Prof. Pabitra Mitra

IIT Kharagpur May – July 25

Deep Learning Based Plant Genotype Prediction from Phenotype information.

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

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

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

# UGC NET Dec'24 - JRF & Assistant Professor (Scorecard 🗹)

2025

- 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 2)

2023

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

#### Publications \_

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

Dec 2024

2024 Sixth Doctoral Symposium on Intelligence Enabled Research. Pdf 2 B Baidya, A Mondal, S Manna, **G Das**, A Santra, A Chakraborty

# Projects \_

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

2025

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.

# Next-Gen Secure UAV: Leveraging Hyperelliptic Curves and Particle Swarm Optimization

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, Torch, PlantCV, FAISS, ViT.

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

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

Next Generation Communication Technologies Using MATLAB Tools (Certi.) <a href="Mailto:Certi.">Indian Institute of Information Technology Una</a>

Feb 2025

Feb 2025

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

#### The International Society for Applied Computing (ISAC).

2025 - present

• Serving as a **Regular Member (Lifetime Membership)** for the ISAC.

#### 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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#### Dr. Shalini Gupta

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#### **Dr. Arindam Sarkar**

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# **Revered Swami Divyasudhananda**

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