

# Shouvik Paul

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[Google Scholar](#)  
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## Personal statement

I want to achieve a prestigious position in educated world and to enhance my knowledge, skills and experience while taking more responsibility and contribution to the growth of the organization.

## Academic Projects:

- **1: Rader Image Classification using Deep Neural Network.**  
Place: ISE Department, AMC Engineering College, India (Remote), Spring 2021-Present; Supervisor: Prof. Ganga Holi
- **2: Artificial Intelligence and Machine Learning applications in 6G Networks.**  
Place: Jawaharlal College of Engineering & Technology, India (Remote), Spring 2021-Present; Supervisor: Prof. Reshma V.K.
- **3: Streaming Data Analysis using PySpark and Apache.**  
Place: CGEC, India, Winter 2021; Supervisor: Prof. Sukhendu Shekhar Mondal
  - Application of Hadoop, PySpark and Apache kafka for streaming data analysis with a team.
- **4: Performance of PDD-IW Based PSO Algorithm on Benchmark IEE CEC 2017, 2018, 2020 And Multi-Dimensional Dataset.**  
Place: CGEC, India, Autumn 2020; Supervisor: Prof. Dr. Sourav De and Prof. Sandip Dey
  - Proposed method has been evaluated over several standard engineering problems, 25 basic benchmark objective functions and CEC'17-20.
- **5: Data Clustering Using Quantum Inspired PSO Based Fuzzy C-Means Clustering Algorithm.**  
Place: CGEC, India, Summer 2020; Supervisor: Prof. Dr. Sandip Dey
  - Addresses the problem regarding pre-mature convergence of solutions due to improper initialization.
- **6: Image Enhancement by Contrast Stretching and Modified Artificial Bee Colony (MABC).**  
Place: CGEC, India, Spring 2020-Summer 2020; Supervisor: Prof. Sourav De
  - Image contrast enhancement (ICE) can be easily treated as an optimization problem where the objective is to improve some measure of image contrast subject to constraints on image pixel intensities or parameters of a transformation function.
- **7: Image Clustering Using Hybrid PSO Algorithm and ABC Algorithm.**  
Place: CGEC, India, Winter 2020; Supervisor: Prof. Sandip Dey
  - The PSO-based and ABC-based image clustering algorithm with the improved fitness function are compared to the K-means clustering.
- **8: Graphical 3D View of Underground Water Level for Better Harvesting.**  
Place: CGEC, India, Autumn 2019-Winter 2020; Supervisor: Prof. Somen Mondal
  - Build a model to predict the underground water level and a graphical 3D view of underground water level.
- **9: Neighbourhood Based Bi-Level Contrast Adjustment for Underwater Image Enhancement Using Modified PSO.**  
Place: CGEC, India, Autumn 2019; Supervisor: Prof. Sourav De and Prof. Sandip Dey
  - Modified Particle Swarm Optimization algorithm has been applied over image datasets to know the most suitable pixel intensity range.
- **10: Image Enhancement using BPSO Algorithm.**  
Place: CGEC, India, Summer 2019-Autumn 2019; Supervisor: Prof. Dr. Sourav De
- **11: Banking Management System.**  
Place: CGEC, India, Summer 2019; Supervisor: Prof. Sukhendu Shekhar Mondal
  - Built a model Banking system which provides employees to perform banking transaction, manage customer accounts in efficient manner.
- **12: Data Clustering by Particle Swarm Optimization Based K-Means Clustering Algorithm.**  
Place: CGEC, India, Spring 2019-Summer 2019; Supervisor: Prof. Sourav De and Prof. Sandip Dey
  - Modification of PSO to reduce the convergence time by the use of a new inertia weight instead of conventional method and the acceleration co-efficients are updated dynamically instead of static values.
- **13: Flight Reservation System: Indiana Aerolinea.**  
Place: CGEC, India, Spring 2019; Supervisor: Prof. Sourav De
  - Built a software which is based on Flight Reservation System.
- **14: Security System Solutions using Web Controlled Home Automation.**  
Place: CGEC, India, Winter 2018; Science Exhibition, Inter College level.
  - Built a model of motion sensor-based web-controlled home automation.

## Self-Initiated Projects:

- 1: Blood Cell Identification, blood cell type detection and blood Cell counting using Image Processing.  
(Dataset is taken from Kaggal.com).
- 2: Sentiment Analysis using NLP and machine learning techniques. Simple voice bot using NLU and NLP.
- 3: Various Websites for College Events (e.g. seminars, webinars and conferences).