



Samrat Roy Chowdhury

Date of birth: 15/09/1994 | **Nationality:** Indian | **Gender:** Male | (+91) 8013847689 |

samratroyc1@gmail.com | 13/f Dr G S Bose Road, 700039, Kolkata, India

WORK EXPERIENCE

01/07/2019 – 09/10/2021 – Rayagada, India

ASSISTANT MANAGER – ADITYA BIRLA

Hired by Hindalco Industries Ltd which is the Metals vertical of the conglomerate Aditya Birla Group and was placed at Utkal Alumina International Limited (Alumina Refinery, E&I department)

- Yokogawa DCS Maintenance & troubleshooting
- PLC Maintenance & troubleshooting [Rockwell, Siemens]
- Field Instrument preventive maintenance
- Field assets performance visualization and analysis using Historian data and alert generation and anomaly detection to implement Condition Based Maintenance
- Work in close collaboration with AspenTech to implement artificial intelligence in the industry to improve equipment availability optimization

Electrical and Instrumentation Department | Manufacturing | utkal.alumina@adityabirla.com |

<https://www.adityabirla.com/> |

Utkal Alumina International Limited, Doraguda , District: Rayagada-765015, 765015, Rayagada,Odisha, India

EDUCATION AND TRAINING

06/02/2022

GRADUATE APTITUDE TEST IN ENGINEERING [GATE 2022] PAPER: INSTRUMENTATION ENGINEERING – IIT Kharagpur

All India Rank: 1045/11406 | <https://gate.iitkgp.ac.in/>

05/2016 – 05/2019 – 88, Raja S.C. Mallick Rd, Kolkata 700032, Kolkata, India

BACHELOR OF TECHNOLOGY – Jadavpur University

Field(s) of study

- Instrumentation and Electronics

Thesis: Development of a Low-Cost Portable Gas Sensing System Based on Molecularly Imprinted Quartz Crystal Microbalance Sensor for Detection of Eugenol in Clove Oil [<https://ieeexplore.ieee.org/document/9181614>]

CGPA: 8.84/10 | <http://www.jaduniv.edu.in/>

06/2012 – 05/2015 – 87/1 College Street, Kolkata-700073, Kolkata, India

BACHELOR OF SCIENCE – University of Calcutta

Field(s) of study

- Physics(Honors)

Overall Grade: 66.25% | <https://www.caluniv.ac.in/>

2012 – 38/2 Naresh Mitra Sarani, Kolkata, Ballygunge, West Bengal,, Kolkata, India

HIGHER SECONDARY EXAMINATION BY WEST BENGAL COUNCIL OF HIGHER SECONDARY EDUCATION – Ballygunge Government High School

Field(s) of study

- Physics,Chemistry,Mathematics,Biology,English,Bengali

Final Grade: 80.8% | <https://wbchse.nic.in>

- Convolutional Neural Networks
- Sequence Models
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization
- Neural Networks and Deep Learning
- Structuring Machine Learning Projects

<https://www.coursera.org/specializations/deep-learning>

12/06/2018 – 12/07/2018 – India

VOCATIONAL TRAINING – The West Bengal Power Development Corporation Limited (WBPDC)

1. Theoretical explanation of different parts of a thermal power plant
2. Practical visits to different plant areas and experience theories in action
3. Control Room Simulation Training: Controlling different parts of the plant; Executing startup and shutdown sequences of power plant

<https://www.wbpdcl.co.in/>

12/2017 – 01/2018 – BD 194, Sector 1, Salt Lake City, Kolkata, Kolkata, India

MITSUBISHI ELECTRIC FA PRODUCTS VIZ. FX PLC AND GX HMI 500 – International Institute For Advanced Training On Control & Automation (IIATCA)

1. PLC ladder logic programming
2. Working with functional blocks
3. HMI interfacing and designing

<http://iiatca.org/>

● PUBLICATIONS

Development of a Low-Cost Portable Gas Sensing System Based on Molecularly Imprinted Quartz Crystal Microbalance Sensor for Detection of Eugenol in Clove Oil

<https://ieeexplore.ieee.org/document/9181614> – 2019

A portable gas sensing system for the detection of eugenol in clove oil. The sensor has been developed on a molecularly imprinted polymer (MIP) modified quartz crystal microbalance (QCM) platform. The system has two parts:

- MIP-QCM sensor and
- sensor signal conditioning unit

● LANGUAGE SKILLS

Mother tongue(s): **BENGALI**

Other language(s):

HINDI

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user