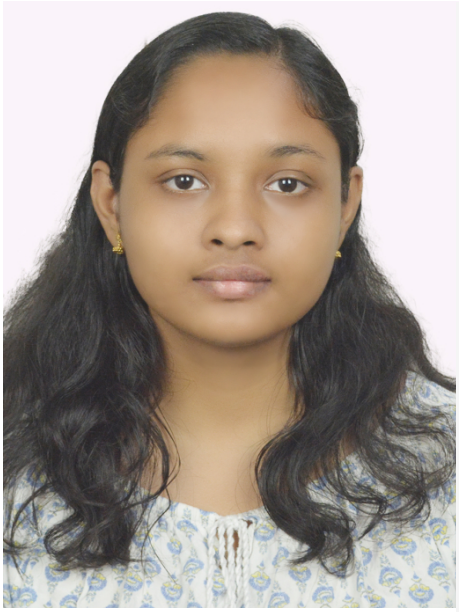

SAMPRATIKSHYA DAS

BTech. 4th year, Biomedical Engineering

CONTACT

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+91 99370 10324

SKILLS

0.1 General Programming

Python, MATLAB

0.2 Operating Systems

Windows

0.3 Softwares

AutoCAD, KiCAD, Inkscape, Origin, Arduino, Microsoft Office Suite

0.4 Languages

English, Hindi, Odia, Sanskrit

EDUCATION

BTech. - Biomedical Engineering — **2020 - ongoing**
National Institute of Technology, Rourkela (India)

Current Status: Ongoing. 4th year (8th semester)

Senior Secondary - General Sciences — **2017 - 2019**
Mothers Public School, Bhubaneswar (India)

Passed with **92.8**%.

Secondary Education - Central Board of Secondary Education (CBSE) — **2006 - 2017**
St. Xavier's High School, Khandagiri, Bhubaneswar (India)

Passed with **10 CGPA**

WORK EXPERIENCE

Research Intern at Massachusetts Institute of Technology — **June '23 - July '23**
Koch Institute of Integrative Cancer Research

Supervisors: **Dr. Angela Koehler**

Other than these, I also learnt about the printing protocol for SMM slides, basics of cell culture and genetic engineering of vector to address t-cell exhaustion. At the Koehler Lab, I focused on developing an assay for Muc2 glycoprotein screening using Small Molecule Microarrays (SMMs)in order to explore interactions between Muc2 and small molecules to address challenges in oral drug delivery. The project involved optimizing conditions for Muc2 assay development, considering factors like protein concentration and antibody ratios.
Other than these, I also learnt about the printing protocol for SMM slides, basics of cell culture and genetic engineering of vector to address t-cell exhaustion.

Winter Research Intern at IIT Kharagpur — **Dec 2022**
Nano-biosensors and Biodevices Laboratory

Supervisors: **Dr. Gorachand Dutta**

I worked on developing blue-laser induced Graphene electrodes and developed a paper on the influence of the different designs of the graphene electrodes on their electroanalytical performance. We currently have a conference paper on the work done by me collaboratively with the PhDs of the department.

COURSES

Immunotechnology, Biomaterials, Cell and Molecular Biology, Tissue Engineering, Analytical Instruments and Techniques, Medical Sciences (Human Physiology and Molecular Biology), Signal and Image Processing, Medical Diagnostic Techniques, Analog and Digital electronics for Bioengineers,

ACHIEVEMENTS

TOEFL

112 out of 120
A certificate issued by Educational Testing Services (ETS) to prove English language proficiency for non-native English language speakers.

GRE

310 out of 340
A certificate issued by Educational Testing Services (ETS).

Kishore Vigyan Protsahan Yojana (KVPY)

Qualifier
Kishore Vigyan Protsahan Yojana (KVPY) Qualifier, in both, written as well as interview round of KVPY-2019.

Junior Mathematics Olympaid 2013

Qualifier
Selected as one of the high scorers to attend the Junior Mathematics Olympiad workshop for JMO-2013.

CERTIFICATES

2022

Udemy Python Bootcamp course completion certificate.

2013-2017

Recieved several certificates for drawing and instrument playing competitions.

Summer Research Intern at IIT Kharagpur — **May '22 – July '22**
Nano-biosensors and Biodevices Laboratory and Clinical Biomarkers Research Laboratory

Supervisors: **Dr. Gorachand Dutta and Prof. Koel Chaudhary**

I worked as a summer intern at the Nano-biosensors and Biodevices Laboratory of the SMST at IIT Kharagpur. During this time, I acquired hands-on experience in several analytical techniques, and Fabrication and Processing of arrays of Screen-printed microelectrodes. I also worked on Electrochemical Impedance-based Biosensor for Asthma-COPD-Overlap diagnosis in the Clinical Biomarkers Research Laboratory in the same department.

PUBLICATIONS

Fabrication of Blue Laser-Induced Graphene Electrodes and Evaluation of Their Electroanalytical Performance — **CS select proceed**
Micro and Nanoelectronics Devices, Circuits and Systems Select Proceedings of MNDCS 2023, Volume 1067, 2023

Status: Accepted and Published

I worked collaboratively with the PhDs in the Nano-biosensors and Biodevices Lab to publish a paper on the Fabrication of Blue Laser-Induced Graphene Electrodes and Evaluation of Their Electroanalytical Performance in Springer's Micro and Nanoelectronics Devices, Circuits and Systems - Select Proceedings of MNDCS 2023

PROJECTS

Project Name — **20XX**
Tool: Android Studio

A short description of your project.

EXTRACURRICULAR

- 2010 - 2016 *Fine Arts,* Pracheen Kala Kendra
  4th year-Certificate Holder
  I studied fine arts and completed till 4th year and learnt several crafts including modelling, glass painting, tie and dye, origami, etc.
  I have also recieved the 2nd prize from the hands of honourable Chief Minister of Odisha, Shri Naveen Pattnaik in sit-and-draw com- petition held on occasion of 64th Vanamahotsava week.

- 2013 - 16 *Intrument,* Avinna Chitrakala
  I learnt to play the electric keyboard and I have also performed in several functions and competitions. I recieved the 2nd prize for two years straight for playing key- board in Annual Talent show organized by Avinna Chitrakala.

- 2021 - present *Club member,* Genesys, NITR
  I have hosted a number of events on behalf of Genesys including an event held in NBC 2022.
  I am also a content writer and designer in the club.
  I have coordinated as well as co-hosted the pre-conference event for GenXConference 2022 -*The Scientific Mockcourt*
  I have also been a member of the organizing team of the flagship event of Genesys the *MAZEHUNT 2022* in *Innovision* the Technical Fest of NIT, Rourkela

INTERESTS

Technical

Biosensors and Biodevices, Nanotechnology, Lab-on-chip, Bio-electrochemistry.

Non-Technical

Proficient in Decision Making, Time Management, Conversational Skills, Curious

Hobbies

Painting, Music, Learning different Languages