

# SOUMITA ROY

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Hardworking and enthusiastic research scholar looking forward to enhance skills in the field of geotechnical engineering with special focus on applications in ground improvement techniques and its application in the field of highway and transportation. Completed B.Tech in Civil Engineering from Dr. B.C. Roy Engineering College, Durgapur in 2018. Undertook courses on AUTOCAD, STAADPRO and REVIT till the pandemic year. Completed MTech in Geotechnical Engineering from Narula Institute of Technology, Kolkata in 2023. M. tech Thesis has been based on Finite Element Analysis using PLAXIS 3D for analyzing behaviour of soft clay treated with PVD. Currently enrolled in PhD from acSIR, CRRI-New Delhi.

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## KEY COMPETENCIES

Ground Improvement Techniques  
PVD  
Soil Stabilization  
Deep Foundation

Soil Investigation  
Road Safety Audit  
ITS  
Flexible Pavement Design

PLAXIS  
AUTOCAD 2D  
STAADPRO  
REVIT

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## PROFESSIONAL EXPERIENCE

### TATA STEEL LTD, JAMSHEDPUR INTERNSHIP

**JULY 2017**

Supervision of FP Complex Building and Burma-mines Parking Lot analyzing approaches undertaken to overcome challenges during construction.

### APTECH, KONNAGAR TRAINEE

**JUNE 2018-NOVEMBER 2019**

Courses undertaken for AUTOCAD 2D, 3D, STAADPRO and AUTODESK REVIT.

### ASSOCIATED ENGINEERING SERVICES, BARRACKPORE GEOTECHNICAL ENGINEER

**MAY 2023-JULY 2023**

Preparation of Soil Investigation Reports for sites located across various locations in West Bengal prior to commencement of construction

Reports prepared on the basis of different tests performed at soil sites that include Standard Penetration Tests, Sieve Analysis, Odometer test, Direct Shear Test and diagrammatic representation of sub-soil profile.

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## PUBLICATIONS AND CONFERENCES

### NCSTCS, 2022

**SEPTEMBER 2022**

### CONFERENCE AT NARULA INSTITUTE OF TECHNOLOGY, KOLKATA

Paper presented: LATERAL LOAD CAPACITY OF PILES IN LAYERED COHESIVE SOIL-A CASE STUDY

A comparative study of Lateral Load capacity of piles of diameters 500mm, 1000mm and 1200mm in layered cohesive soil at a site using finite element analysis in PLAXIS 3D and IS 2911/Part1/Sec 2.

**GEORARP,2023**

**AUGUST 2023**

**CONFERENCE AT JADAVPUR UNIVERSITY, KOLKATA(ORGANIZED BY IGS, KOLKATA CHAPTER)**

Paper presented: FINITE ELEMENT MODELLING OF EMBANKMENT RESTING ON PVD INSTALLED SOFT CLAY

Received Outstanding Paper Award for the paper as mentioned above that involves use of PLAXIS 3D to analyze the performance of soft soil treated with Prefabricated Vertical Drains.

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## **EDUCATION**

**SUNRISE ENGLISH MEDIUM SCHOOL, BELURMATH**

**APRIL 2005- MAY 2014**

CISCE CLASS X-2012 || 88.6%

CISCE CLASS XII-2014 || 89%

**DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR**

**AUGUST 2014-MAY 2018**

Bachelor of Technology || Civil Engineering || 7.82 CGPA

**NARULA INSTITUTE OF TECHNOLOGY, KOLKATA**

**SEPTEMBER 2021- AUGUST 2023**

Masters of Technology || Geotechnical Engineering || 9.48 CGPA

**ACADEMY OF SCIENTIFIC AND INNOVATIVE RESEARCH, CRRI, NEW DELHI**

**AUGUST 2023-ONGOING**

Doctor of Philosophy || Transportation Geotechnics ||

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