

DIBYENDU CHAKRABORTY



☎: 09051308162

✉:dibyenduchakra07@gmail.com

CORE COMPETENCIES

~3D Modelling
~Image Interpretation
~Spatial Database Management
~Hydrological Modelling
~Geological Mapping
~Spatial Analysis
~Change Detection (Decadal Land use)
~All types of Thematic maps
~Digital Elevation Model (DEM)
~Team Management

3D Modelling/ Spatial Analysis /All types of Thematic Mapping / Watershed Mapping

Preferred Industry: IT Industry and ITES, Environmental Sector

*Refines research processes through development and improvement of research department tools and procedures, resulting in a more streamlined, strategic research experience in **Geological Mapping/ 3D Modelling/ Spatial Analysis** with an organization of repute*

PROFILE SUMMARY

- Result-oriented professional with experience of 10 years in Image Processing, Spatial Analysis, 3D Modelling, Hydrological Modeling and Geological Mapping
- Tools and Technologies- .NET, HTML, JavaScript, CSS, PostgreSQL, Tomcat
- Other Skills- ArcGIS Server, ARC Object, Spatial Database, Post GIS, WMS and Oracle.
- Currently working with **ERM India Pvt. Ltd., Kolkata as GIS Consultant.**
- Proficient in Site Acquisition Analysis using Satellite Imageries, Google Earth along with Data Capture and GIS Database Management Data Manipulation and visualization
- Recognized as the Functional Area Expert (FAE) **Land Use Category 'B'** accreditation with **NABET (National Accreditation Board for Education and Training)**
- Experience in Geoprocessing with geodatabase creation and management, raster and vector processing and analysis using software like AutoCAD Map, Map INFO, Arc GIS 10.7.1 and ERDAS IMAGINE
- Possess skills in providing technical solution for new projects and initiatives, defining project plan,
- Analytical and quality-oriented professional with an eye for detail with problem solving capabilities

ORGANIZATIONAL EXPERIENCE

Since Feb'15 with ERM India Pvt. Ltd., Kolkata as GIS Consultant

May'13 – Jan'15 with SENES Consultants India Pvt. Ltd., Kolkata as GIS Specialist

Apr'10 – Apr'13 with OPSIS System, Kolkata as Technical Executive

Sep'09 – Mar'10 with Net wings InfoTech Pvt. Ltd., Kolkata as GIS Analyst

Sep'08 – Aug'09 with Consulting Engineering Services (INDIA) Limited, Kolkata as CAD & GIS Operator

Key Result Areas:

- Integrating, analyzing, sharing, and displaying geographic information and specifications of geospatial databases
- Analyzing spatial information, editing and mapping the data and presenting the results of all operations; maintaining the structures necessary for GIS data storage
- He has a lot of experience in environmental sensitivity analysis, ecological sensitivity analysis, land suitability analysis, flood risk assessment study, peak flood calculation, digital elevation model (DEM), digital terrain model (DTM), contour generation from different sources, and cut & fills volume calculation.
- Geo-reference all kinds of Satellite Image data and digitized point, line, and polygon features and analysis of all types of GIS applications.
- Compiling & maintaining geological/geospatial databases and processes within a GIS environment using software like AutoCAD Map, Map INFO, Arc GIS 10.3.1, ERDAS IMAGINE, and many more for developing maps for internal usage
- Dealing with Remote Sensing & GIS; supervising the work of GIS staff and communicating with the client related to GIS and Geology of the area
- Studying different sources of hydroelectric power, water resources, oil & gas exploration, roads, water supply, port, and urban development
- Conducting technical studies and documentation of requirements, feasibility, project sizing, costing, and benchmarking of GIS applications integration in organizations
- Advising on land use and resource management & risks from extracting hydrocarbons prospects for safety concerns and constructing facilities for hydrocarbon processing and transportation without putting significant impact on the environment
- Maintaining regular contact with the onshore team for reporting present work situation and discussing potential challenges on & off the field
- Refining research processes through development and improvement of research department tools and procedures, resulting in a more streamlined, and strategic research experience

•

Highlights:

- Received the **Exemplary Performance Award** in recognition of the Cumulative Environmental Impact Assessment (CEIA) Study for Siddhirganj Power Hub funded by World Bank
- Used a wide range of equipment and modern techniques such as Global Positioning System (GPS) to depict spatial record of site being analyzed
- Increased efficiency and placement of wells by collecting and monitoring data which led to crucial decisions such as Watershed Modelling, Change Detection, and Stream Order Generate which was very effective and helpful for that project and appreciated by senior management
- Proposed innovative ideas for improving techniques and usage of equipment such as Arc Hydro Tools for Hydrological Modelling for improvement of techniques and usage of equipment in the GIS process

MAJOR PROJECTS

- Develop ETL application using ArcObject which transforms data from shapefile to geodatabase with some business logic.
- Developed QA/QC application using ArcObject.
- Developed AddIns for Cumulative Environmental Impact Assessment using ArcObjects.
- Developed commands/Tools using ARCOBJECT to improve the productivity of the team.
- Cumulative Environmental Impact Assessment (CEIA) Study for the Siddhirganj Power Hub
- CNOOC Uganda/Kenya Land
- EIA Studies and obtaining EC, FC, WLC, CTC, CTO and Has Waste Authorization, Hindustan Oil Exploration Company EIA
- Study for attaining EC in respect of Development Drilling of 30 Wells in Tripura
- EIA for Development Activities in Jharia CBM Block, ONGC Limited
- Initial Infrastructure Assessment and EIA for Township Project of Hiland Group
- Water, Sanitation, Health, and Nutrition Infrastructure and Facility Mapping
- Development of Surface Water Spatial Data Bank using Quick Bird Satellite Image and Cadastral Map for Fisheries Department, Government of West Bengal
- Township Planning Project for Assam Rifles
- West Bengal Land Records & National Informatics Centre

ACADEMIC DETAILS

2011	M.Sc. in Geography from Madras University, Chennai
2006	B.Sc. from Calcutta University, Kolkata
Others:	
2009	Master Diploma in GIS & Remote Sensing, Jadavpur University, Kolkata

PERSONAL DETAILS

Date of Birth:	31 st March 1985
Address:	1/25, Netaji Nagar, Tollygunge, Kolkata-700092, West Bengal
Languages Known:	English, Hindi, and Bengali

ANNEXURE

Project:	OIL 7 Seismic Block EIA
Organisation:	ERM
Duration:	December'19- Till date
Platform:	Arc GIS 10.7.1, Arc Object
Description:	Was responsible for preparing thematic maps for representing the Environmental and Socio-Economic condition of the study area based on interpretation of Satellite Image and Toposheets and through field verification. I was involved in the customization of the Arcgis workflow manager based on the client requirement.
Responsibilities:	As a Team Lead I am involved in every phase of the Project.
Project:	Environmental and Social Impact Assessment for the New Imported LNG-Based Gas-fired Combined Cycle Power Project
Organisation:	ERM
Duration:	Feb'19- Till date
Platform:	Arc GIS 10.7.1
Description:	The Government of Bangladesh (GoB) has given the highest priority to the development of the power sector in the country and has committed to making electricity available to all citizens by 2021 (Power Division 2015). The GoB has further extended its vision for power supply out to 2030 and has prepared the Power System Master Plan (PSMP) in 2020. The plan forecasts a supply surplus scenario by 2030 with an expected power demand of approximately 34,000 MW against a generation capacity of 40,000 MW (Power Division 2015).
Responsibilities:	As a team member was responsible for prepared different types of thematic maps like: <ul style="list-style-type: none">• All kinds of Thematic maps are related to EIA and ESMP Projects.• Air pollution industries map• Digital Elevation Map (DEM)• Future development industries map• Hourly Noise monitoring location map, etc.
Project:	Cumulative Environmental Impact Assessment (CEIA) Study for the Siddhirganj Power Hub
Organisation:	ERM
Duration:	May'17- July'19
Platform:	Arc GIS 10.3.1
Description:	A large number of power plants with large infrastructures had been commissioned in this region while a few more are presently under construction. In addition to the power plants, the area was surrounded by different types of industries like cement plants, pulp and paper mills, fuel oil storage depots, steel re-rolling mills, spinning mills and garment industries, brick kilns and also included urban developments that had occurred along the stretch of the river. These establishments caused air and noise emissions in the area as well as directly or indirectly contributed to the pollution load to the Sitalakhya River.
Responsibilities:	As a team member was responsible for prepared different types of thematic maps like: <ul style="list-style-type: none">• Decadal land use map for showing the change of land cover• Air pollution industries map• Health infrastructure map• Future development industries map• Hourly Noise monitoring location map, etc.
Project:	CNOOC Uganda/Kenya Land
Organisation:	ERM
Duration:	Aug'15-Feb'17
Platform:	Arc GIS 10.3.1
Description:	The Uganda–Kenya Oil Pipeline was a proposed pipeline to transport crude oil from Uganda's oil fields in the Northern and Western regions to the Kenyan port of Lamu to the Indian Ocean. The main objective of the project was to estimate how much land was needed to acquire for the project and the socio-economic impact of the project surrounding the project site.

Responsibilities:

- Prepare different kinds of thematic maps like:
 - Government and Administrative Maps for showing pipeline route belonged to which part of the Uganda and Kenya
 - Demographic and Population Map for distribution of Population
 - One Indigenous People Map for distribution of Population
 - Landuse Map showed the present status of the land use and helped in identifying Which category of land use was needed to acquire for the project purpose.

Project: **EIA Studies and obtaining EC, FC, WLC, CTC, CTO, and Haz Waste Authorization, Hindustan Oil Exploration Company**

Organisation: SENES Consultants India Pvt. Ltd.

Duration: Feb'14- Mar'16

Platform: Arc GIS 10.3.1

Responsibilities: Analyzed Land Cover Map of Pipeline for understanding the land use feature of a particular area and also evaluated the characteristic change of land use after development. Explored about DEM for topography interpretation using Topography and Satellite Image. The main objective of the project was production and drilling of three existing wells namely Dirok-1, Dirok-2, and Dirok-4 and completed three new development wells with producer wells for producing hydrocarbons and prospecting safety without putting significant impact on the environment and ensuring parallel gas pipeline to evacuate natural gas from GGS to GPP.

Project: **EIA Study for obtaining EC in respect of Development Drilling of 30 Wells in Tripura**

Organisation: SENES Consultants India Pvt. Ltd.

Duration: Jun'13- Jan'14

Platform: Arc GIS 10.3.1

Responsibilities: Assigned as the Land Use Expert for preparation of a land cover map of the project area; analyzed the impact on land use after drilling and the characteristic change of land use after development. Created Environmental Setting Map for analysis of the impact on surroundings livelihood, agriculture land, and forest area and Ecological Sensitivity Map for analyzing the distance from the Drill Site to the Sanctuary. Developed 30 wells across 6 gas fields where the main objective was to drill, evaluate, and extract hydrocarbons prospects for safety and construct facilities for hydrocarbon processing and transportation without putting a significant impact on the environment.

Project: **EIA for Development Activities in Jharia CBM Block, ONGC Limited**

Organisation: SENES Consultants India Pvt. Ltd.

Duration: Aug'13-May'14

Platform: Arc GIS 10.3.1

Responsibilities: Studied the land-use feature of the particular project area and the impact of land use of surroundings livelihood, agriculture after development. The main objective of the project was to establish the prevailing baseline along with the environmental and socio-economic conditions of the project sites and surroundings without putting a significant impact on the environment.

Project: **Initial Infrastructure Assessment and EIA for Township Project of Hiland Group in Rajarhat**

Organisation: SENES Consultants India Pvt. Ltd.

Duration: Oct'13-Aug'14

Platform: Arc GIS 10.3.1

Responsibilities: Assisted in the preparation of Land Cover Map of land use feature of the particular project area and analyzed the impact on land after development along with the preparation of Accessibility Map for measuring the distance from NH to important centers like the bus stand/ railway station of the particular project area.

Project: **Water, Sanitation, Health, and Nutrition Infrastructure and Facility Mapping**

Organisation: SENES Consultants India Pvt. Ltd.

Duration: Jul'13- Nov'14

Platform: Arc GIS 10.1

Responsibilities: Planned Slum Map of Ranchi Municipal Corporation and analyzed the water facility, sanitation facility, Primary Health Center (PHC), waste disposal, and drainage facility. Prepared maps after analysis of primary data and situational analysis of water, sanitation, health infrastructure & facility inside the slum area of Ranchi Municipal Corporation

Project: **Development of Surface Water Spatial Data Bank using Quickbird Satellite Image and Cadastral Map for Fisheries Department, Government of West Bengal**

Organisation: OPSYS System

Duration: May'10- Apr'13

Platform: Arc GIS 10.3.1

Responsibilities: Digitized the Perennial Water Body (>0.5hac) from Satellite Image and prepared pre-monsoon Perennial Water Body Map for fisheries purpose

Project: **Township Planning Project for Assam Rifles**

Organization: Net Wings Infotech Pvt. Ltd.

Duration: Sep'09- Mar'10

Platform: Arc GIS 9.2

Responsibilities: Completed primary data collection and preparation of map & master plan at micro-level; implement A large maintenance and operations of utilities and services

Project: **West Bengal Land Records & National Informatics Centre**

Organisation: Consulting Engineering Services (India) Limited

Duration: Sep'08- Aug'09

Platform: AutoCAD Map

Responsibilities: Acted as Member of GIS Team managing Vectorization of Cadastral Map & Digitization of Cadastral Map