SHANTHI S

GIS/Geospatial Analyst

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CAREER OBJECTIVE

GIS/Geospatial Analyst with strong hands-on experience in flood hazard mapping, LULC analysis, and spatial modelling using ArcGIS Pro, QGIS, Python, and Google Earth Engine. Seeking an technical role to support geospatial analysis, mapping, data processing, and reporting.

INTERNSHIP EXPERIENCE

Project Intern - GIS & Flood Hazard Mapping 05/2025 – 07/2025
IIT Madras
- Assisted in flood hazard zonation using Frequency Ratio (FR) modelling
- Processed and reclassified raster datasets for spatial analysis
- Applied GIS-based overlay analysis to identify flood-prone zones
- Used Python and Google Earth Engine for geospatial preprocessing
- Prepared thematic maps and technical outputs for academic evaluation

GIS / Geospatial Analyst – Project Experience
Client-based Projects | Remote
- Performed **LULC classification** using machine learning on satellite imagery
- Prepared and processed **raster datasets** (clipping, normalization, sampling)
- Implemented **Random Forest and SVM** models using Python
- Achieved **99% accuracy (RF)** and **>90% accuracy (SVM)**
- Generated **classified maps and land-use area statistics**

Civil AutoCAD Intern 06/2024 – 07/2024
US SOFT Authorized Training Centre
- Created civil engineering drawings using AutoCAD
- Supported design documentation and drafting tasks
- Gained exposure to real-world engineering drawings and standards

EDUCATION

B.E. Civil Engineering 2026
Anna University R.M.K. Engineering College
CGPA: 9.55

Class XII - 90.8%

Class X - 80.6%

SOFT SKILLS

- Analytical Thinking
- Quick Learner
- Team Collaboration
- Technical Documentation

ACHIEVEMENTS

1st Prize – Intra-Department Paper Presentation (SLAM Integrated with UAV)

2nd Prize – Project Demonstration (Wind Farm Site Selection using GIS)

Awarded ₹3,500 vouchers for academic excellence (2nd & 3rd year)

Received ₹10,000 scholarship (2nd & 3rd year)

PROJECT EXPERIENCE

Predictive Modelling of Land Cover Changes – Chennai Metropolitan Area
- Performed spatio-temporal LULC change detection using Remote Sensing & GIS
- Developed predictive models for urban growth corridors.
- Generated maps to support urban planning and future development analysis

Comparative Flood Hazard Mapping (FR vs Weighted Overlay)
- Created flood hazard zonation maps using Frequency Ratio and Weighted Overlay methods
- Compared objective and subjective modelling approaches
- Validated spatial outputs for disaster risk assessment and planning

Wind Farm Site Selection Using GIS – Tamil Nadu
- Identified optimal wind farm locations using GIS-based weighted overlay analysis
- Integrated environmental, terrain, and infrastructure criteria
- Produced suitability maps for renewable energy planning

Other Academic Project:
- Rice Husk Ash Concrete Blocks (Sustainable construction material study)

CONFERENCE PRESENTATIONS

RAICE 2024, Velammal Engineering College
"SLAM Integrated with UAV – Applications in Civil Engineering"

RAACE 2025, Kongunadu College of Engineering and Technology
Paper: "Wind Farm Site Selection Using GIS"

CERTIFICATIONS

Advanced Mapping with ArcGIS – Coursera

Basics of Python – Coursera

Fundamentals of GIS – Coursera

NPTEL: GPS Surveying, Advanced Concrete Technology, Soft Skills

ArcGIS Online Basics – Esri MOOC