INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD

Centre for Geospatial AI & Digital Twins (CGDT) & Department of Design

Advertisement for Consultant Positions – HMDA: 2D GIS Base Map for HMR & 3D Digital Twin for TCUR Region Project

The Centre for Geospatial AI & Digital Twins (CGDT) and the Department of Design, IIT Hyderabad, invite applications for multiple consultant positions under the Development *of 3D Digital Twin and 2D GIS-Based Geospatial Base Map for the Hyderabad Metropolitan Region (HMR)* Project. This large-scale initiative involves geospatial data integration, 3D digital twin development, spatial analytics, and governance frameworks in collaboration with System integrator and government agencies.

Title of the Project	"GIS Base Map and Geospatial 3D Digital Twin of Telangana Core Urban Region"
Scope of the Project	*3D Digital Twin and 2D GIS-Based Geospatial Base Map for Hyderabad Metropolitan Region (HMR)*
Funding agency	HMDA
Name of PI	Dr. Shiva Ji
Email	shivaji@des.iith.ac.in
Institute	Centre for Geospatial AI & Digital Twins (CGDT) and Department of Design, Indian Institute of Technology Hyderabad, India

Project Overview

The Government of Telangana, through HMDA, is developing an integrated geospatial and digital twin ecosystem to support evidence-based planning, sustainable development, and smart governance across the Hyderabad Metropolitan Region (HMR).

General Terms (Applicable to All Positions)

- **Engagement Type:** Contractual / Project-Based
- **Duration:** 22 months (On renewable basis / extendable based on Project Requirement)
- **Work Location:** IIT Hyderabad / HMDA Office Ameerpet, Hyderabad / Field Visits

Available Positions

S. No.	Position	No. of Posts	Experience Required	Reporting To	Key Expertise / Skills	Key Responsibilities (Summary)	Qualifications	Salary (₹/Month)	Work Location
1	**Geospatial Digital Twin Lead (Project Head)**	01	15+ Years	Metropolitan Commissioner, HMDA / PI – CGDT, IIT Hyderabad / CGDT Advisory Committee	Project leadership & management, vendor management, 3D Digital Twin development, LiDAR data management & processing, Python, ArcGIS, QGIS, large-scale geospatial data handling	Strategic & technical leadership, system design & governance, inter-agency coordination, project planning & delivery, quality assurance, stakeholder management and liaisoning	Bachelor's / B.Arch / B.Plan / B.Des / M.Tech / M.Arch / M.Plan / M.Des or equivalent; Master's in GIS / Geoinformatics / Remote Sensing / Civil / Urban Planning / BIM / Digital Twins / Computer Science / Design / Architecture or related domains; **PhD desirable;**	₹1,70,000 – ₹2,10,000	**HMDA Office, Ameerpet, Hyderabad/Visit to IIT Hyderabad /Filed Visits as Required**

#	Role	No.	Experience	Reporting	Technical Skills	Responsibilities	Qualification	Salary	Location
							prior experience in Government / public sector projects desirable		
2	**Senior Geospatial Business Analyst**	01	10+ Years	Project Head / SCRUM Master	3D Digital Twin workflows, LiDAR processing, Python scripting, ArcGIS/QGIS, geospatial data validation	Requirements analysis, dataset validation, governance-oriented spatial analysis, technical documentation, data governance & compliance	Bachelor's / B.Arch / B.Plan / B.Des / M.Tech / M.Arch / M.Plan / M.Des or equivalent; Master's in GIS / Geoinformatics / Remote Sensing / Civil / Urban Planning / BIM / Digital Twins / Computer Science / Design / Architecture or related domains; **PhD**	₹1,20,000 – ₹1,50,000	**HMDA Office, Ameerpet, Hyderabad/Visit to IIT Hyderabad /Filed Visits as Required**

#	Role	No.	Experience	Reports To	Technical Skills	Responsibilities	Qualification	Salary	Location
							desirable; prior experience in Government / public sector projects desirable		
3	**GIS Technical Analyst cum SCRUM Master**	01	5+ Years	Project Head / SCRUM Master	3D Digital Twin processing, LiDAR workflows, Python automation, ArcGIS/QGIS, Agile/SCRUM, PostGIS (preferred)	GIS database management, geospatial processing & analytics, SCRUM facilitation, Agile coordination, documentation & reporting	Bachelor's / B.Arch / B.Plan / B.Des / M.Tech / M.Arch / M.Plan / M.Des or equivalent; Master's in GIS / Geoinformatics / Remote Sensing / Civil / Urban Planning / BIM / Digital Twins / Computer Science / Design / Architecture or related domains;	**₹1,10,000 – ₹1,40,000**	**HMDA Office, Ameerpet, Hyderabad/Visit to IIT Hyderabad /Filed Visits as Required**

#	Position	No.	Experience	Reporting	Skills	Responsibilities	Qualifications	Salary	Location
							PhD desirable; prior experience in Government / public sector projects desirable		
4	**Junior Research Fellow (JRF)** *(Likely to be Convertible to PhD Based on Performance)*	06	0–3 Years *(Renewable Basis)*	Project Head / Senior Analysts / SCRUM Master	GIS tools, spatial data pre-processing, digital twin support, visualization, BIM, computer programming, R Studio, Python, Architecture	Data collection & pre-processing, modelling support, patent & publication assistance, metadata & QA, visualization	Bachelor's / B.Arch / B.Plan / B.Des / M.Tech / M.Arch / M.Plan / M.Des or equivalent; Master's in GIS / Geoinformatics / Remote Sensing / Civil / Urban Planning / BIM / Digital Twins / Computer Science / Design / Architecture	₹37,000 (Consolidated)	**On Board at IIT Hyderabad /Visit to HMDA Office, Ameerpet, Hyderabad/ Filed Visits as and when Required**

					or related domains		

Note:

- Rolling advertisement till the posts are filled.
- Only shortlisted candidates will be called for interview.
- PI reserves the right to alter the number of vacancies in each given posts and/or keep it open till the deserving candidate is found.
- Interested candidates should apply at the google form at given link.
- Shortlisted candidates for personal interview will be informed over email only and suitable date for interview will be intimated to them.
- No accommodation will be given for attending personal interview.
- No TA/DA will be paid to the candidates for appearing in interview.
- Candidates with prior experience in relevant area will be given preference.
- Candidates who are about to finish their master's program may also apply (provisional certificate from their head of institution required).
- Candidates may write email for any clarification to given email address of PI.

How to Apply

Submit applications through the online form

Link: https://forms.gle/X6ot6R1FdFHTw9uq9

A **single PDF** must include:

- Cover Letter
- Updated CV
- Portfolio
- One-page Statement of Interest