# Career Pathways, and Pay-Scale:

## *Inspiring the Next Generation of Space & Geospatial Professionals*

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# Introduction

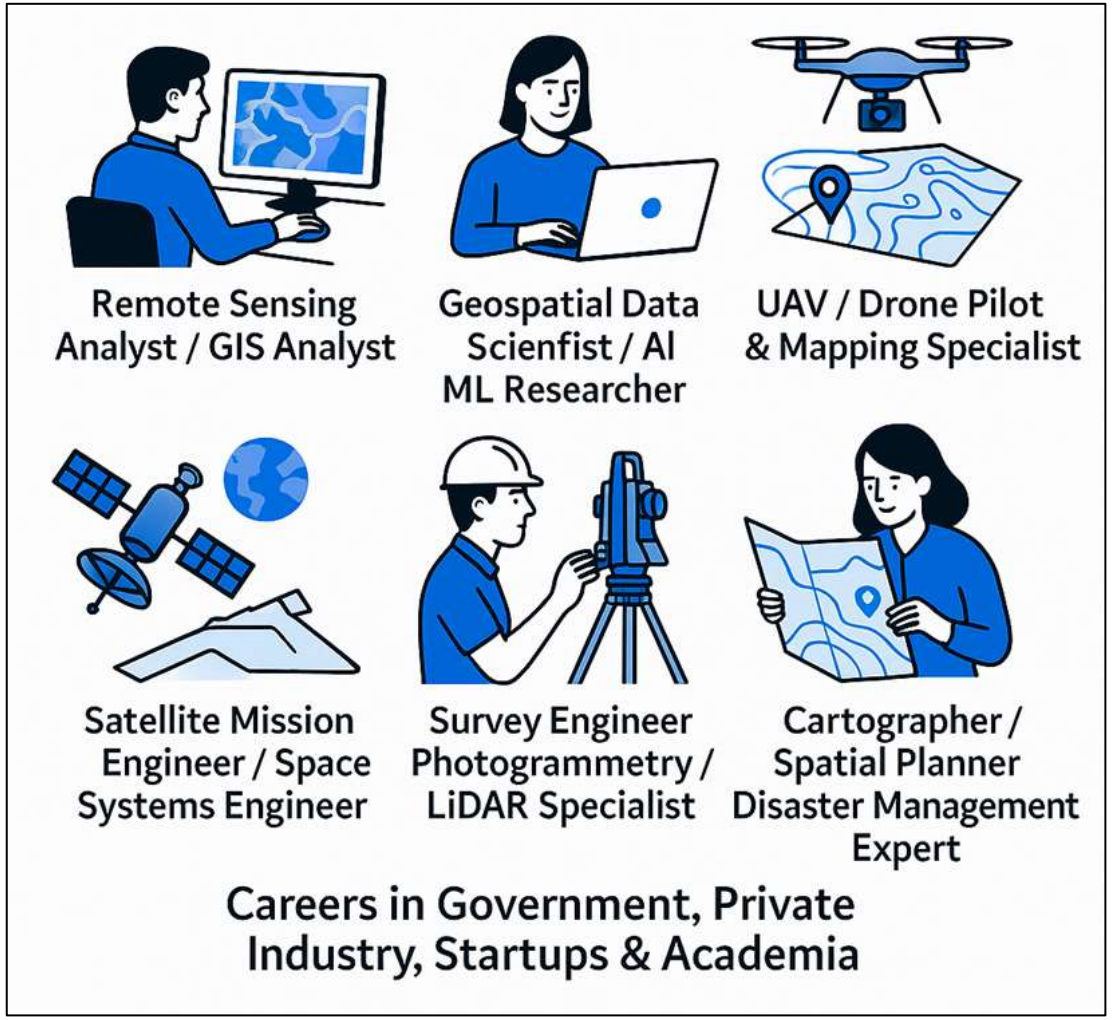
The **Space and Geospatial sectors** are transforming the world by enabling smarter decision-making, sustainable development, and technological innovation.

From satellite-based communication and navigation to GIS-driven urban planning and drone-based mapping, these technologies now play a crucial role in **national development, security, climate monitoring, and disaster management**.

- *Rapid expansion of space & geospatial technologies*
- *Major applications in disaster response, governance, and environment*
- *Rising demand for highly skilled professionals*
- *A powerful field to impact society and shape the future*

# Career Opportunities & Pathways

- Remote Sensing Analyst / GIS Analyst
- Geospatial Data Scientist / AI-ML Researcher
- UAV / Drone Pilot & Mapping Specialist
- Satellite Mission Engineer / Space Systems Engineer
- Survey Engineer / Photogrammetry / LiDAR Specialist
- Cartographer / Disaster Management Expert
- Careers in Government, Private Industry, Startups & Academia



# Manpower Gap in Advanced Geospatial Technologies

- Workforce still dependent on **traditional GIS & manual mapping.**
- Limited exposure to **AI/ML-based geospatial modelling**
- Insufficient hands-on training.
- Lack of **industry-oriented training programs & internships**
- Need for **upskilling and re-skilling** to meet global standards


## Call to Action

**The future demands skilled manpower who can master the art and science of geospatial technologies. Investment in training, capacity building, and practical learning is essential.**

# Inspiring the Next Generation

- Promote innovation, internships & hands-on projects
- Encourage industry–academia collaboration
- Organise workshops, hackathons, seminars & student chapters
- Increase career counseling & skill-based training
- Support women in STEM and inclusive participation
- Build awareness about national opportunities & global missions
- Industry visits to Remote Sensing Centres, Drone Labs
- Mentorship from leading professionals & alumni networks
- Live projects with Smart City Mission, Agriculture Tech, Disaster Management


SENSRS


Research team


Research team

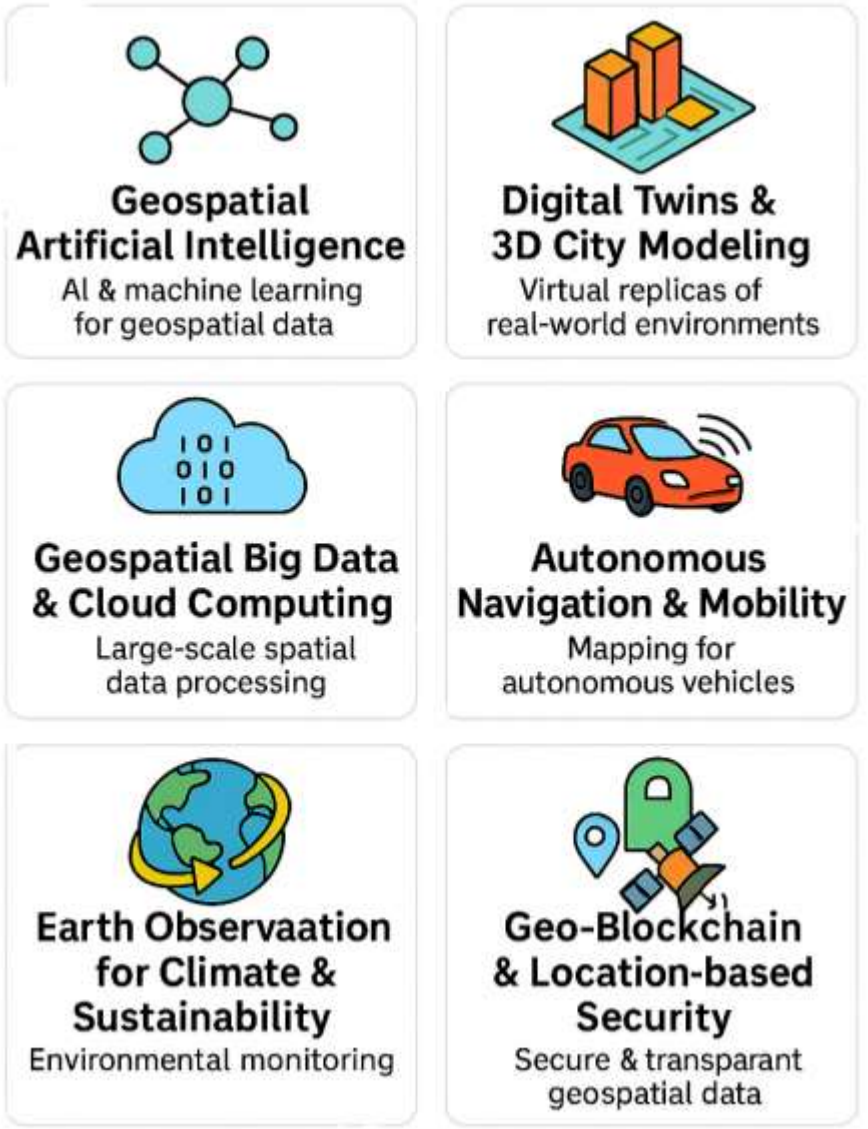

Sutlej river


Survey


Drone survey

# Emerging Application of Geospatial

- Geospatial Artificial Intelligence (GeoAI)
- Digital Twins & 3D City Modeling
- Geospatial Big Data & Cloud Computing
- Autonomous Navigation & Intelligent Mobility
- Earth Observation for Climate & Sustainability
- Geo-Blockchain & Location-based Security
- Metaverse, AR/VR & Immersive Geospatial Visualization
- SpaceTech & Small Satellite Constellations
- IoT-Geospatial Sensor Networks
- Drones & Advanced Imaging Sensors



# Thanks

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