



# Building Skilled GIS Workforce

In today's fast-transforming technology environment, while businesses try to keep pace with new advancements, the industry leaders unanimously agree that in order to stay relevant and innovate, a capable tech-conversant workforce is necessary. Companies look for top-notch efficiency in professionals possessing, critical thinking and research capabilities to further add value to a business and give better direction to policy and decision-makers. The significance and adoption of Geographic Information System (GIS) as a foundational technology across the length and breadth of diverse business workflows is increasing rapidly. Nearly every sector whether under government or private purview has realized the relevance of leveraging location intelligence through GIS in their business strategies. As Geospatial Technology plays a prominent role in the overall development of society and making human life better in various aspects, there is indeed a need for skilled manpower in this domain; educating the future workforce with necessary GIS skills has become an imperative.

Symbiosis Institute of Geoinformatics, Pune (SIG), one of the leading institutes in India is working in the same direction. SIG offers dedicated programs in M.Sc. in Geoinformatics, M. Sc in Data Science, and M.Tech. program that aims to provide the students with an opportunity to explore and acquire a critical understanding of the nature of Geospatial data and spatial environment related processes. For the past 17 years, the institute has been consistently working towards training the future

leaders of tomorrow with the right set of skills to make them capable to solve different real-world issues with geospatial technology. The institute also offers data science program that includes spatial components to understand data variety, volume, velocity veracity, and visibility. SIG incorporates GIS in different research domains ranging from natural resources to transportation and infrastructure.

The use of appropriate tools to explore the geospatial data has its importance, without the use of which it is a difficult task to explore and understand the nature of Geospatial data. As business landscapes are changing rapidly and sectors like healthcare, emergency management, governance, infrastructure, among others embrace location intelligence in their business strategies to decode data, GIS is increasingly becoming the need of the hour.

With everyone using mapping in daily life, integration of GIS with emerging technologies like AI, ML, Big Data, and (IoT) are finding new-world applications. Also, integration, analysis, and visualization of vector as well raster data is challenging and requires more computational efforts. Esri India is working with Symbiosis Institute of Geoinformatics, Pune (SIG) to support the academic community with learning and entrepreneurship in location analytics. The user-friendly products offered by Esri India enable the students to understand the workflow of geospatial data and improve their capabilities to explore it more and also inspire them to implement their ideas for solving different real-world challenges.