NIYAM IT™

GIS Analytics and Applications

Get a global perspective.

Add real-world meaning and context to your data with the power of GIS.

Using advanced spatial modeling software and highly-specialized tools and techniques, Niyam's GIS experts can collect, organize, and analyze geospatial data to reveal unique, mission-critical insights. We leverage extensive connections throughout the GIS community to ensure products employ the latest data and science from trusted sources – then we connect technology with analytic strategies to deliver a complete, end-to-end solution. Our expertise in software development, hazard science, engineering, analytics, risk communication, and public policy gives us the breadth of knowledge to manage GIS projects of any size or complexity, for both federal agencies and private enterprise.

GIS Analytics

Our analysts are experts at interpreting GIS data to deliver unique, high-precision analytic solutions.

Predictive Analytics

Our predictive analytics team analyzes current and historical trends to reveal hidden patterns, identify risks and opportunities, and deliver timely, data-driven predictions you can rely on. Deploy predictive modeling across your organization to inform decision-making, guide policy choices, optimize internal processes, and dramatically improve mission-critical outcomes.

Spatial Analysis

Apply cutting-edge spatial analysis to specific geographic locations to uncover new critical insights, prepare accurate plans and estimates, and inform future decision-making.

Interact with data collections and maps to answer specific questions, then visualize the geographic information and analytic results to drill for deeper insights.

Custom Risk Assessments

Understand your vulnerabilities with a clear, accurate analysis of potential risks and hazards. Our team of risk assessment experts is considered a national leader in hazard impact analysis. In fact, we manage FEMA's Hazus Program – one of the world's only free and open risk modeling tools – implemented by emergency management organizations across the U.S. and around the globe. Our all-in-one Risk Management Toolkit combines GIS technology with big data and custom software, providing a tailored "pre-covery" solution for disaster resilience.

Custom risk analytics can help your organization respond quickly to changing developments with precise, up-to-the-minute situational awareness planning. Our economic loss modeling helps communities pinpoint optimal resilience strategies in the face of a changing climate and increased vulnerability, ensuring that policies are data-driven and successfully implemented.

Custom Visualization Tools

Get a clear view of your data with custom dashboards and visualization tools built to your specifications. Easily integrate with existing applications and web services to ensure all your team members have access to timely, applicable information. Host tools locally or deploy them securely from the cloud.

Custom GIS Applications

Drawing on our deep experience in queries, coding, visualization, and big data, our team can design and deploy GIS solutions tailored to meet your specific workflow needs and mission objectives.

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GIS for Enterprise

As an ESRI Partner, Niyam leverages the power of tools like ArcGIS Desktop, ArcGIS Server, and ArcSDE to deliver complete enterprise-wide GIS system design, capacity planning, and optimization. We are also experts in delivering open source geospatial solutions wherever applicable. Get a suite of specialized tools designed to help teams access and analyze data, solve complex problems, and share geospatial information across the entire organization.

Web-Based Applications

Let Niyam develop a custom web portal for viewing, editing, and exporting your GIS data. Boost team collaboration by providing easy online access and simple-to-use data management tools. Control user permissions and customize every aspect of the user experience to fit your workflow needs and mission goals.

Geodatabase Design

Effectively store, retrieve, and transform mission-critical GIS data with a dedicated geodatabase. Apply custom schemas to define, organize, and optimize unique datasets. Build in easy access and integration with critical geospatial web services.

Geoprocessing Models

Automate unique tasks for data analysis, editing, and management with a custom-built framework for processing geographic data. Our GIS development experts can automate any level of data transformation, from simple batch formatting tasks to implementing complex spatial modeling sequences.
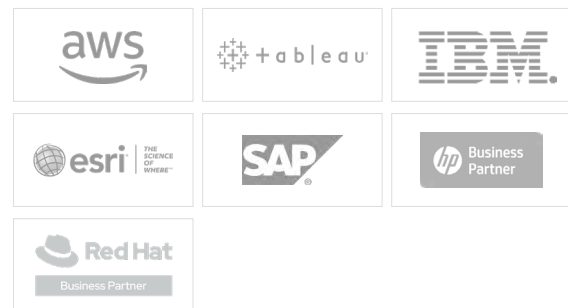
Why Niyam?

Since our founding in 2007, Niyam has developed an impressive record of successful outcomes, earning our status as the go-to provider of innovative IT solutions. Today, Niyam sits at the vanguard of the industry, delivering state-of-the-art, mission-critical technologies to federal agencies and the public marketplace. Our solutions are proven to accelerate collaboration, increase efficiency, and consistently provide rapid, breakthrough results – all while remaining conscious of shifting timelines and budgets.

Our Tools and Processes

- ArcGIS Desktop, ArcGIS Server, ArcSDE
- Open Source & Public Data
- Amazon Cloud S3 Storage
- Python & R Models, Jenkins Build
- Tableau, KIbana, Apache Hive
- SQL, MongoDB, PostgreSQL
- Agile Scrum, eXtreme Programming
- Pentaho Data Integrator, Apache NiFi and FME
- Spark, MapR Data Platform

Our Technology Partners

Learn More

For more information about our **GIS Analytics and Applications** capabilities, contact us at 703-429-2450 or email **GIS@niyamit.com.**

KEY OUTCOME

NYC Hazard Mitigation Plan

When New York City's Office of Emergency Management required a city-wide multi-hazard risk assessment, Niyam was called upon to provide a solution. Our open source **Flood Assessment Structure Tool** was deployed to calculate 100-year flood losses at 800,000 structures across the city in **80 seconds** – delivering a vastly improved outcome over the previous hours-long process.