

## Data Science & Advanced Analytics

We transform complex data into actionable intelligence. Through mining data to discover patterns, trends, and relationships, we create intelligent workflows and visual representations that inspire action. Applying intelligent automation for AI/ML based predictive modeling to deliver a broad spectrum of solutions to help you make sense of complex and disparate datasets.

### Services

#### Data Engineering

We create the right data architecture to facilitate transformation of raw data into actionable insights for decision-making. This includes development of data pipelines to extract raw data from original sources, transform it into a format suitable for modeling, and load it into an analytic database for data science and advanced analytics.

#### Descriptive Analytics

We provide business intelligence, data mining, and statistical analysis services to develop insights into what has happened (past data) or is currently happening (real-time data) within systems or processes of interest.

#### Predictive Analytics

We use artificial intelligence (AI) and machine learning (ML) algorithms to automate and scale data-driven decisions based on the outputs of trained, tested, and evaluated models that meet or exceed performance targets.

#### Geospatial Analytics

We incorporate spatial data and features (e.g., geographic coordinates, zip codes, census tracts) and use appropriate statistical methods for applications involving location as an important factor (e.g., location-based pattern recognition, prediction of location-based events, selection of the best location for a specific use case).

#### Diagnostic Analytics

We perform root cause analysis, isolate confounding variables, and model cause-effect relationships to uncover why an event of interest has happened or is happening to help inform design of effective interventions.

#### Data Visualization

We combine visual representations of data with effective storytelling to deliver meaningful insights that are easy to understand and inspire action. This includes design, development, deployment, and maintenance of strategic, operational, and analytic dashboards to support decision-making at multiple organizational levels.

#### Prescriptive Analytics

We apply decision science techniques (e.g., benefit-cost analysis, decision and risk analysis, optimization, simulation) to inform complex decisions by identifying the preferred course of action based on expected likelihood, consequences, uncertainties, value tradeoffs, and risk tolerance for outcome measures of interest.

### Methodology

Our methodology based on the CRoss-Industry Standard Process for Data Mining (CRISP-DM) methodology incorporates Agile, CMMI, DevOps, Human-Centered Design, Lean, and Six Sigma principles and leading practices and is grounded in our firm belief that people are at the heart of any successful data science and analytics initiative.

### Point of Contact

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