

AI and Machine Learning: Today's Implementation Realities

Duration: 3 Days

Description

AI and machine learning have returned to the spotlight. This time, they've caught the attention of the C-Suite and stakeholders as the leading value-drivers within data science.

With this level of visibility, today's machine learning needs to do more than uncover interesting insights. Most organizations focus almost exclusively on algorithms, software, coding, and platforms. Although these tactics are important, they only make up one of three pillars required to run a productive AI operation.

Each day of this three-day workshop focuses on one of the pillars:

- Preparing for AI and machine learning action and adoption
- AI opportunity identification, project design, and preparation
- The methods and mechanics of machine learning

Attend this workshop to learn how to apply a comprehensive implementation framework that not only ensures superior model performance, but prepares the operational environment for automated decision-making and the organizational team for adoption.

Delegates will learn

- Identify, qualify, and prioritize viable and actionable AI opportunities
- Develop a strategy for applying data-driven decisions aligned with organizational priorities
- Evaluate the latest machine learning methods and approaches in view of the project design

Audience

- C-Suite executives looking to set a confident vision and realistic goals for AI
- Line-of-business leaders ready to move from mere analysis to measurable action
- Functional managers seeking a low-risk/high-impact implementation framework

- Data scientists wanting to stand out from quants and coders with broader process acumen
- BI and IT leaders concerned with deploying and operationalizing models
- AI consultants wishing to experience the modern complexities of organizational AI implementation
- Innovation planners charged with investigating leading strategies for AI practice development
- View a comprehensive implementation framework for running an AI operation
- Acquire a balance of tactical and strategic skills required to stand out as a data scientist
- Prevent AI project failure and understand why it's almost never due to technology
- Enhance your professional profile with unique translator skills in low supply and high demand

Outline

What is AI, Machine learning and Data Science?

- What is the Organizational Value of AI & Machine Learning?
- How is Data Science Different from AI?
- Machine Learning
- What are the Skills Needed for Machine Learning?
- What Does a Data Scientist Do All Day?

Data Science Core Concepts

- Orientation to Big Data
- Trends within the analytically competitive organization
- The advent of Data Science
- What is machine learning' role in Big Data?
- ROI of data science, big data and associated analytics
- The future of data science, big data and advanced analytics

How to Think Like A Data Scientist

- Stats 101 in ten minutes
- A / B testing and experiments
- BI vs predictive analytics
- IT's role in predictive analytics
- Statistics and machine learning: complementary or competitive?
- Primary project types
- Common analytic and machine learning algorithms
- Popular tools to manage large-scale analytics complexity

- Performing a data reconnaissance
- Building the analytic sandbox
- Preparing train / test / validation data
- Defining data sufficiency and scope

The Cao's Roadmap

- The Modeling Practice Framework™
- The elements of an organizational analytics assessment
- Project Definition: The blueprint for prescriptive analytics
- The critical combination: predictive insights & strategy
- Establishing a supportive culture for goal-driven analytics
- Defining performance metrics to evaluate the decision process
- What is the behavior that impacts performance?
- Do resources support stated objectives?
- Leverage what you already have
- Developing and approving the Modeling Plan
- Selecting the most strategic option
- Planning for deployment
- Measuring finalist models against established benchmarks
- Preparing a final Rollout Plan
- Monitoring model performance for residual benefit

Building The Goal-Centered Analytics Operation

- Attracting and hiring the right analytic talent
- The roles and functions of the fully-formed analytic project team
- Specialization in analytic project teams
- Analytic opportunity identification, qualification and prioritization
- Organizational resistance and developing a culture for change
- Project failure is not the worst outcome
- Staging the organizational mind shift to data-driven decisioning
- Motivating adoption by domain experts, end users and leadership
- Recording ongoing organizational changes
- Monitoring and advancing organizational analytic performance
- “Democratizing” analytics: Advantages and risks of “self-service”
- Standing up an agile analytic modeling factory
- Knowledge retention and skill reinforcement
- The Future of AI and Advanced Analytics
- From Rhetoric to Reality
- Biggest Driver of AI and Machine Learning Innovation

- What's Next in Data Science, AI and Machine Learning?
- Defining Your Organization's AI Reality