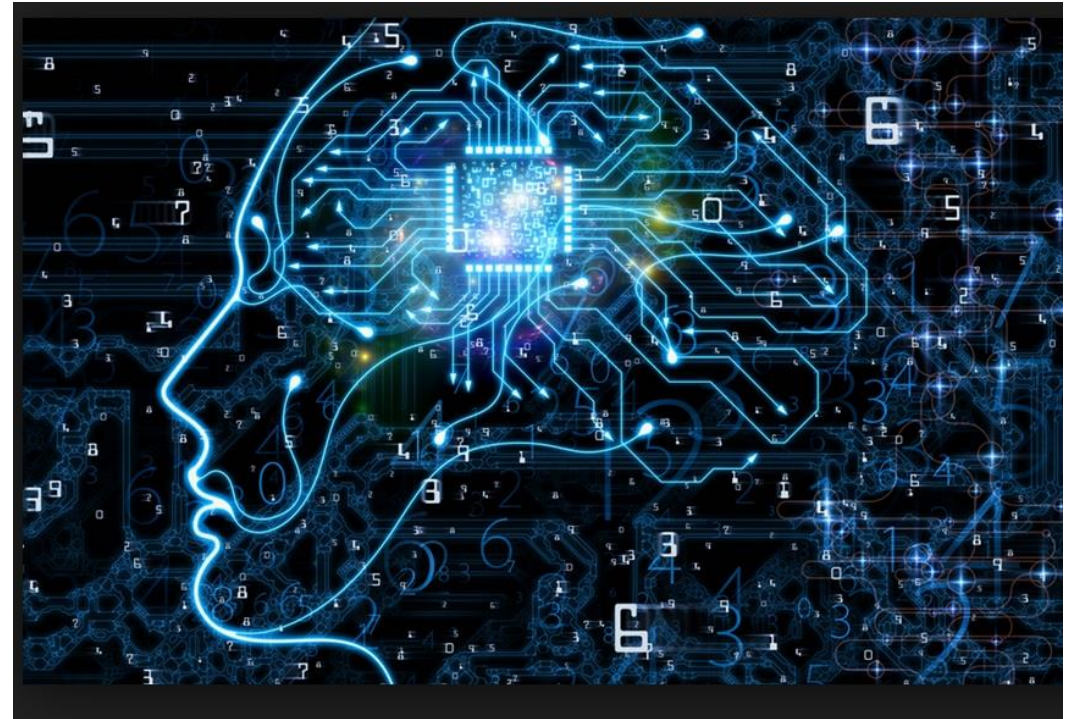# Future of Insights:
Machine Learning, Text Analytics, and Generative AI

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Future of Insights: *Machine Learning, Text Analytics, and Generative AI*

SYNOPSIS

We will explore the exciting possibilities of this field and how it is shaping the future of insights discovery by gaining an understanding of machine learning, unstructured data, and generative AI. You'll explore the differences between supervised and unsupervised machine learning, learn about the analysis of unstructured text, and gain a better understanding of what generative AI is and why it is important to insights and data analysis professionals.

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SESSION 1: TYPES OF MACHINE LEARNING

Introduction to Machine Learning
- Introduction to machine learning
- Comparisons of machine learning to classical statistical approaches
- Applications of machine learning for developing insights

Supervised Machine Learning
- Introduction to supervised machine learning
  - ❖ Explanation of overview of supervised learning; interpretability vs accuracy; applications of supervised learning
- Supervised machine learning process
  - ❖ Key terminologies in supervised learning process; process review for supervised machine learning
- Overview of supervised learning algorithms
  - ❖ Statistical methods; kernel based; tree based; network based

Unsupervised Machine Learning
- Introduction to unsupervised machine learning
  - ❖ Explanation of unsupervised learning; key terminologies in unsupervised learning
- Applications of unsupervised machine learning
  - ❖ Clustering; dimension reduction; anomaly detection

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Unstructured Data

- Differences between structured and unstructured data

- Examples of unstructured data

- Applications of unstructured text analysis

- Analysis of unstructured text
  - ❖ Frequency-based approaches
  - ❖ Information extraction
  - ❖ Prediction-based approaches
  - ❖ Transformer-based models

Generative AI

- Definition and importance of generative AI

- A timeline of generative AI development

- Examples of key generative AI in the world today

- Potential applications for generative AI

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