AI: MACHINE LEARNING ESSENTIALS TRAINING

This foundational 8-hour long course will de-mystify machine learning and put you back on the cutting edge.

Course Agenda

- Overview and Expectations
- AI for the Built Environment
    - Benefits and Uses
    - Data Mining
- Real-World Applications of AI
    - Utilizing AI Technology Today
    - Algorithmic Decision-Making Examples
    - Machine Learning Examples
- Getting Started in ML
    - Data Scientist Role and Tools
    - Best Practices and Data Requirements
    - Choosing the Right Algorithms/Models
    - Supervised Learning – Prediction or Inference
    - Bias-Variance Tradeoff
    - Cross-Validation and Partitioning
    - Unsupervised Learning – Clustering
- Exploring Different ML Algorithms
    - Regression Type Models
    - Classification Type Models
    - Neural Networks
- Supporting Tools
    - Dimensionality Reduction
    - Principal Component Analysis
    - Ensemble – Gradient Boosting
    - Sensitivity Analysis
- Wrap-Up and Appendices
    - Appendix A – Glossary
    - Appendix B – References