DAY 1

Artificial Intelligence Basics

- Artificial Intelligence and Machine Learning
- Typical applications
- The architecture of a system
- Software tools: Python
- Software tools: R
- Software tools: WEKA

DAY 2

Data Analytics and Visualization

- Data gathering
- Feature engineering
- Statistical analysis
- Data visualization
- Dimensionality reduction

DAY 3

Unsupervised and Supervised Learning

- Similarity estimation
- Clustering
- Association rules
- Recommender systems
- K-Nearest Neighbors
- Decision Trees
- Naïve Bayes
- Artificial Neural Networks

DAY 4

Natural Language Processing

- Extracting structure from raw text

- Regular expressions
- Word features and semantics
- Text classification
- Information extraction
- Question answering systems

DAY 5

Building a Chatbot

- Extracting information from conversations
- Chatbot as a search engine
- Natural Language Understanding
- Natural Language Generation
- Building a system