Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Splunk for Analytics and Data Science

CODE:	LENGTH:	PRICE:
SPL_SFADS	16 Hours (2 days)	Request Price

Description

This 13.5-hour course is for users who want to a5ain operational intelligence level 4, (business insights) and covers implementing analytics and data science projects using Splunk's statistics, machine learning, built-in and custom visualization capabilities.

Objectives

Topic 1 – Analytics Workflow

- Define terms related to analytics and data science
- Describe the analytics workflow
- Describe common usage scenarios
- Navigate Splunk Machine Learning Toolkit

Topic 2 – Training and Testing Models

- Split data for testing and training using the sample command
- Describe the fit and apply commands
- Use the score command to evaluate models

Topic 3 – Regression: Predict Numerical Values

- Differentiate predictions from estimates
- Identify prediction algorithms and assumptions
- Model numeric predictions in the MLTK and Splunk Enterprise

Topic 4 – Clean and Preprocess the Data

- Define preprocessing and describe its purpose
- Describe algorithms that preprocess data for use in models
- Use FieldSelector to choose relevant fields
- Use PCA and ICA to reduce dimensionality
- Normalize data with StandardScaler and RobustScaler
- Preprocess text using Imputer, NPR, TF-IDF, and HashingVectorizer

Topic 5 – Clustering

- Define Clustering
- Identify clustering methods, algorithms, and use cases
- Use Smart Clustering Assistant to cluster data

- Evaluate clusters using silhoue5e score
- Validate cluster coherence
- Describe clustering best practices

Topic 6 – Forecasting Fields

- Differentiate predictions from forecasts
- Use the Smart Forecasting Assistant
- Use the StateSpaceForecast algorithm
- Forecast multivariate data
- Account for periodicity in each time series

Topic 7 – Detect Anomalies

- Define anomaly detection and outliers
- Identify anomaly detection use cases
- Use Splunk Machine Learning Toolkit Smart Outlier Assistant
- Detect anomalies using the Density Function algorithm
- View results with the Distribution Plot visualization

Topic 8 – Classify: Predict Categorical Values

- Define key classification terms
- Identify when to use different classification algorithms
- Evaluate classifier tradeoffs
- Evaluate results of multiple algorithms

Audience

Splunk classes are designed for specific roles such as Splunk Administrator, Developer, User, Knowledge Manager, or Architect.

Prerequisites

To be successful, students should have a solid understanding of the following courses:

- Fundamentals 1, 2, & 3
- Advanced Searching & Reporting Or the following single-subject courses:
- What is Splunk?
- Intro to Splunk
- Using Fields
- Scheduling Reports and Alerts
- Visualizations
- Working with Time
- Statistical Processing
- Comparing Values
- Result Modification
- Leveraging Lookups and Sub-searches
- Correlation Analysis
- Search Under the Hood
- Introduction to Knowledge Objects
- Creating Field Extractions
- Search Optimization

Programme

- Analytics Framework
- Regression for Prediction
- Cleaning and Preprocessing Data
- Algorithms, Preprocessing and Feature Extraction
- Clustering Data
- Detecting Anomalies
- Forecasting
- Classification

Test and Certification

Our certification tracks provide comprehensive education for Splunk customer and partner personnel according to their areas of

Further Information

Instructor-led lecture with labs, delivered via virtual classroom or at your site.

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.