Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Splunk 8.0 for Analytics and Data Science

CODE:	LÄNGE:	PREIS:
SPL_SFAADS	4.48 Hours (0.56 Tage)	€1,500.00

Description

This 13.5 hour course (3 days a 4,5 hours) is for users who want to attain 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.

Lernziel

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

Voraussetzungen

Splunk Fundamentals 1
Splunk Fundamentals 2
Splunk Fundamentals 3
or equivalent Splunk experience

Inhalt

Module 1 – Analytics Workflow
- Define terms related to analytics and data science
- Define the analytics workflow
- Describe common usage scenarios
- Navigate Splunk Machine Learning Toolkit

Module 2 – Exploratory Data Analysis
Describe the purpose of data exploration
Identify SPL commands for data exploration
Split data for testing and training using the sample command
Module 3 – Predict Numeric Fields with Regression
Differentiate predictions from estimates
Identify prediction algorithms and assumptions
Describe the fit and apply commands
Model numeric predictions in the MLTK and Splunk Enterprise
Use the score command to evaluate models
Module 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, and NPR, TF-IDF, HashingVectorizer and the cluster command

Module 5 – Cluster Data

Define Clustering
Identify clustering methods, algorithms, and use cases
Use Smart Clustering Assistant to cluster data
Evaluate clusters using silhouette score
Validate cluster coherence
Describe clustering best practices
Module 6 – Anomaly Detection
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
Optimize anomaly detection with the Local Outlier Factor
View results with the Distribution Plot visualization
Module 7 – Estimation and Prediction
Differentiate predictions from forecasts
Use the Smart Forecasting Assistant
Use the StateSpaceForecast algorithm
Forecast multivariate data
Account for periodicity in each time series
Module 8 – Classification
Define key classification terms
Use classification algorithms
- AutoPrediction
- LogisticRegression
- SVM (Support Vector Machines)
- RandomForestClassifier

Evaluate classifier tradeoffs
Evaluate results of multiple algorithms

Kurstermine

Auf Anfrage. Bitte kontaktieren Sie uns

Zusätzliche Information

Diese Schulung ist auch als Vor-Ort-Schulung verfügbar. Bitte kontaktieren Sie uns, um mehr zu erfahren.