



Big Data Analytics

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Classroom



xgrzu3g


Score

	Score
Attendance	5%
Assignment	25%
Test 1	5%
Midterm exam	30%
Test 2	5%
Final exam	30%



Grade

Score	Grade
80-100	A
75-79	B+
70-74	B
65-69	C+
60-64	C
55-59	D+
50-54	D
0-49	F



Lessons

Week	Topic
1	<ul style="list-style-type: none">• Introduction to Big Data• Big Data Analytics Life Cycle• Problems Discovery• Apache Hadoop• MapReduce Implementation (Part1)
2	<ul style="list-style-type: none">• MapReduce Implementation (Part2)• Apache Spark• Apache Spark Implementation
3	<ul style="list-style-type: none">• NoSQL Big Data Storage• NoSQL for Big Data Processing
4	<ul style="list-style-type: none">• Batch Processing• Low-Level Apache Spark Data Processing• Low-Level Apache Spark Data Processing Implementation• High-Level Apache Spark Data Processing

Lessons

Week	Topic
5	<ul style="list-style-type: none">• High-Level Apache Spark Implementation• Data Aggregations and Joins for High-Level Apache Spark• Data Aggregations and Joins for High-Level Apache Spark Implementation
6	<ul style="list-style-type: none">• Introduction to Apache Spark Streaming• Apache Spark Structured Streaming• Apache Spark Structured Streaming Implementation
7	<ul style="list-style-type: none">• Streaming Source and Sink• Streaming Source and Sink Implementation
8	<ul style="list-style-type: none">• Streaming Event-Time Window Operation and Watermarking• Streaming Event-Time Window Operation and Watermarking Implementation• Test 1

Lessons

Week	Topic
9	<ul style="list-style-type: none">• Midterm Examination
10	<ul style="list-style-type: none">• Overview of Big Data Analytics• Big Data Analytics Visualisation• Big Data Analytics Visualisation Design• Big Data Analytics : Clustering• Big Data Clustering Implementation and Visualisation
11	<ul style="list-style-type: none">• Big Data Analytics : Classification• Big Data Classification Implementation and Visualisation• Big Data Analytics : Regression• Big Data Regression Implementation and Visualisation

Lessons

Week	Topic
12	<ul style="list-style-type: none">• Big Data Analytics : Time Series• Big Data Time Series Implementation and Visualisation• Big Data Analytics : Recommendation System• Big Data Recommendation System Implementation and Visualisation
13	<ul style="list-style-type: none">• Big Data Analytics : Association Rules• Big Data Association Rules Implementation and Visualisation
14	<ul style="list-style-type: none">• Big Data Analytics : Text Analysis• Big Data Text Analysis Implementation and Visualisation

Lessons

Week	Topic
15	<ul style="list-style-type: none">• Big Data Analytics : Graph Analysis• Big Data Graph Analysis Implementation and Visualisation• Big Data Analytics : Deep Learning• Big Data Deep Learning Implementation and Visualisation
16	<ul style="list-style-type: none">• Analyse and Summarise Key Concepts of Big Data Analytics• Test 2
17	<ul style="list-style-type: none">• Final Examination