Modulbeschreibung
BDASEM - Big Data Analytics Seminar

Modultitel:
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Leistungspunkte:
3

Modulverantwortlicher:
Markl, Volker

Sekretariat:
EN 7

Ansprechpartner:
Alexandrov, Alexander

URL:
http://www.dima.tu-berlin.de/

Modulsprache:
Englisch

Kontakt:
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Lernergebnisse

Participants of this seminar will acquire knowledge about recent research results and trends in the analysis of web-scale data. Through the work in this seminar, students will learn the comprehensive preparation and presentation of a research topic in this field. In order to achieve this, students will get to read and categorise a scientific paper, conduct background literature research and present as well as discuss their findings.
After the course, students will be able to critically read and evaluate scientific publications, and to conduct background research. They will be capable of preparing for and giving oral presentations on research topics for an expert audience, of analyzing the state of the art of a research topic, and of summarizing it in a scientific paper. They should also understand techniques used in the scientific community like peer reviews, conference presentations, and defenses of the findings after their presentation, as well as they should understand methods for large-scale data analytics.

The course is principally designed to impart:
Technical skills: 50x Methodological skills: 20x System skills: 10x Social skills: 20x

no translation

Lehrinhalte

Both the sciences and industry are currently undergoing a profound transformation: largescale, diverse data sets - derived from sensors, the web, or via crowd sourcing - present a huge opportunity for data-driven decision making. This data poses new challenges in a variety of dimensions: in its unprecedented volume, in the speed at which it is generated (its velocity) and in the variety of data sources that need to be integrated.
A whole new breed of systems and paradigms is currently developed to be able to cope with that these challenges. The field of Big Data Analytics deals with the technological means of gaining insights from huge amounts of data. In this seminar, students will review the current state of the art in this field. At the beginning of the semester students will receive a set of primary literature, which consists of basic reading material for every participant.
Students will review this material under the guidance of a mentor. At the same time, students will learn about presentation techniques, techniques for critical reading of scientific papers, as well as scientific writing. Students will use secondary literature to research the assigned topic assigned, including research journals and articles published at information management conferences such as WWW, VLDB, or SIGMOD.

no translation

Modulbestandteile

Lehrveranstaltungen	Art	Nummer	Turnus	SWS
BDASEM - Big Data Analytics Seminar	SEM	0434 L 477	WS	2

Arbeitsaufwand und Leistungspunkte

BDASEM - Big Data Analytics Seminar (Seminar)	Multiplikator:	Stunden:	Gesamt:
Plenary sessions	15.0	2.0h	30.0h
Preparation/Individual work	15.0	4.0h	60.0h
			90.0h

Ein Leistungspunkt entspricht 30.0 Stunden (Es wird folgende Rundungsart verwendet: Aufrunden)

Beschreibung der Lehr- und Lernformen

At the beginning of the semester you will receive a set of primary literature. Then you should find and use secondary sources to investigate the topic assigned to you in the seminar, which should go beyond the supplied primary literature. A few weeks after receiving the primary literature you will have to give a short presentation of approx. 10 minutes. The presented topic will be discussed by the other seminar participants in order to give you constructive feedback about the content of your talk.

In the further course of the semester you will have to give a long final presentation of approx. 30 minutes. In addition to the talk you will also have to hand in a 10-15 page technical report describing and evaluating your topic. Details may vary and will be announced in the respective semester.

Voraussetzungen für die Teilnahme / Prüfung

Wünschenswerte Voraussetzungen für die Teilnahme zu den Lehrveranstaltungen:

This course is aimed at master students with a focus on database systems and information management and should be chosen after the 2nd master semester. To be able to participate you should have successfully completed 'Database Technology DBT' and one of the 'Advanced Information Management AIM' (1,2,3) courses.

In the ideal case this seminar should be taken by students who are directly in front of their master thesis, or have already completed it and are interested in a doctorate in information management.

It is vital that you have a sound understanding of written and spoken English.

Verpflichtende Voraussetzungen für die Modulprüfungsanmeldung:

keine Angabe

Abschluss des Moduls

Prüfungsform: **Benotet:**
Portfolioprüfung   benotet

The exam will be done as a 'portfolio examination', including two deliverable assessments, totaling for 100 portfolio points:
- seminar presentation (50 portfolio points)
- written seminar report (50 portfolio points)

The final grade according to § 47 (2) AllgStuPO will be calculated with the faculty grading table 2.
(Die Gesamtnote gemäß § 47 (2) AllgStuPO wird nach dem Notenschlüssel 2 der Fakultät IV ermittelt.)

Prüfungselement	Gewicht
(Deliverable assessment) presentation	50
(Deliverable assessment) written seminar report	50

Dauer des Moduls

Das Modul kann in 1 Semester(n) abgeschlossen werden.

Maximale teilnehmende Personen

Das Modul ist auf 16 Teilnehmer begrenzt.

Anmeldeformalitäten

Students are required to register via the DIMA course registration tool before the start of the first lecture (http://www.dima.tu-berlin.de/). Within the first six weeks after commencement of the lecture, students will have to register for the course at QISPOS (university examination protocol tool) and ISIS (course organization tool) in addition to the registration at the DIMA course registration tool.

Literaturhinweise, Skripte

Skript in Papierform: **Elektronisches Skript:**
nicht verfügbar   *nicht verfügbar*

Empfohlene Literatur:
Will be released at the beginning of the seminar.

Zugeordnete Studiengänge

Die Modulversion wird auf keiner Modulliste verwendet.

This module is mandatory for the Erasmus Mundus IT4BI master program, and it is mandatory elective for the EIT-Digital Data Science Master.

Sonstiges

keine Angabe