

LMU LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN FACULTY OF MATHEMATICS, COMPUTER SCIENCE AND STATISTICS ELITE MASTER PROGRAM DATA SCIENCE @LMU STATISTICS + INFORMATICS

DATA SCIENCE @LMU

PROF. DR. GÖRAN KAERMANN

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Data Science als Studienfach:

06366 Köthen HS Anhalt Data Science M.Sc.	3104 Hildesheim Uni Hildesheim Data Science M.Sc.	80359 München Uni München (LMU) Data Science M.Sc.
08056 Zwickau Westfälische HS Zwickau Data Science B.Sc.	32657 Lemgo TH Ostwestfalen-Lippe Data Science B.Sc.	83435 Bad Reichenhall IUBH Bad Reichenhall [P] Data Science B.Sc., M.Sc.
07001 Chemnitz TU Chemnitz Data Science Master	35031 Marburg Uni Marburg Data Science B.Sc., M.Sc.	
13353 Berlin Beuth HS für Technik Data Science M.Sc.	44227 Dortmund TU Dortmund Data Science B.Sc., M.Sc.	
18469 Potsdam Uni Potsdam Data Science M.Sc.	59872 Meschede FH Südwestfalen Data Science M.Sc.	
18482 Potsdam ADU University [P] Data Science B.Sc., M.Sc.	64295 Darmstadt FH Kassel Data Science M.Sc.	
24109 Kiel FH Kiel Data Science B.Sc.	70133 Karlsruhe HfK Karlsruhe Data Science B.Sc.	

Quelle: studieren.de

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Data Science als Studienfach:

Das Studium • Studiengänge • **Ergebnisse (23):** • Wirtschaftliche Studien • Weiterbildungen

Filtern nach: Studienform, Abschluss, Studiengang

Quelle: wirtschaftsinformatik-studieren.net

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Data Science

Eine konsolidierte Definition von Data Science fehlt.


- Data Science = Kombination aus Statistik und Informatik
- Data Science = Data Driven Problem Solving
- Data Science = zweckorientierte Datenanalyse

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Kernbereiche nach GI

- Data Engineering
- Data Analytics
- Data Prediction
- Machine Learning



GESELLSCHAFT FÜR INFORMATIK
ARBEITSPAPIER
DATA SCIENCE: LERN- UND AUSBILDUNGSMATERIAL
OKTOBER 2019
www.gi.de

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Maschinelles Lernen

Aus dem Inhalt:

- 3. Maschinelles Lernen
- 5. Regression
- 8. Lineare Regression
- 14. Logistische Regression
- 16. Verzerrung-Varianz Dilemma
- 17. Hauptkomponentenanalyse
- 26. Bayesregel



Kiriakos Kersting · Christoph Langer · Constantin Rothkopf · Jörg Hoffmann
Wie Maschinen lernen
Künstliche Intelligenz verständlich erklärt
Springer

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Begrifflichkeiten

2010: Big Data → 2015: Data Science → 2020: KI




The 25 Hottest Skills That Got People Hired in 2014

The 25 Hottest Skills of 2014 on LinkedIn

1. Cloud Computing
2. Data Science
3. Artificial Intelligence
4. Big Data
5. Analytics

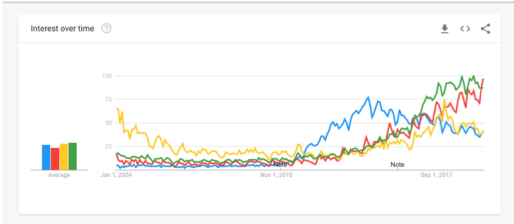
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Big Data, Data Science & AI

Big Data Search term | Data Science Search term | Artificial Intell... Search term | Machine Lear... Search term

United States | 2004 - present | All categories | Web Search



Interest over time


100
75
50
25
0
Average

Jan 1, 2004 | Nov 1, 2010 | Sep 1, 2017

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Data Science @LMU



- Data Science = Kombination aus Statistik und Informatik
- **Interdisziplinäres** Masterprogramm Data Science an, was in **gleichen Teilen** von den Instituten für **Statistik und Informatik** getragen.
- Studierende werden international rekrutiert.

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Curriculum

1st Semester 30 ECTS	2nd Semester 27 - 33 ECTS	3rd Semester 27 - 33 ECTS	4th Semester 30 ECTS
Statistics			Master Thesis and Disputation
Informatics			
Fundamentals of Data Science	Predictive Modelling		
Human Computation and Analytics		Data Science Practical	
	Data Ethics and Data Security		
	Elective Courses		
	Current Research in Data Science		

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Data Science Lehre @LMU and Munich

- MSc Data Science 
- Data Science Professional Certificate Program (www.datascience-certificate.de) 
- German Data Science Days 
- Data Science Lab 

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Data Science Forschung @LMU and Munich

- Munich Center for Machine Learning (www.mcml.ai) 
(eines der 4 nationalen Kompetenzzentren in ML)
- Munich School of Data Science (MuDS) (www.mu-ds.de) 
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