



# Machine Learning and Data Analytics in Finance and Accounting

Munich, Germany  
August 5 - 23, 2019  
[www.mda-misu.de](http://www.mda-misu.de)



# Munich 2019

Sessions: August 5 – 23

Session will take place at: University of Munich tba

## Patronage



**Prof. Dr. Thorsten Sellhorn**

Institute for Accounting, Auditing and Analysis  
Munich School of Management

## Lecturer



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# Schedule

<u>Date</u>			<u>2:00 p.m. – 7:00 p.m.</u>	
Sat, 3			Students Residence Welcome	
Sun, 4	---			
<u>Date</u>	<u>Block</u>	<u>10.00 a.m. – 1.15 p.m.</u>	<u>Readings</u>	<u>MISU Events</u>
Mon, 5	Intro	Introduction to machine learning and its application in finance and accounting (GH/AW)	MG* - Chapter 1 (p. 1 – 4)	<b>MISU Welcome Summer Event</b> 5:30 p.m. Schellingstr. 3, on the terrace
<u>Date</u>	<u>Block</u>	<u>9.00 a.m. – 13.00 p.m.</u>	<u>Readings</u>	<u>MISU Events</u>
Tue, 6	Introduction to Python	Python Basics for Data Science	MG* - Chapter 1 (p. 5 – 11)	<b>City Tour by bus</b> 5.00 p.m.
<u>Date</u>	<u>Block</u>	<u>9.00 a.m. – 13:00 p.m.</u>	<u>Readings</u>	<u>MISU Events</u>
Wed, 7	Introduction to Python	Importing and cleaning data		
<u>Date</u>	<u>Block</u>	<u>9.00 a.m. – 13.00 p.m.</u>	<u>Readings</u>	
Thu, 8	Introduction to Python	Natural language processing	MG* - Chapter 7 (p. 323 – 325)	
	Recap and team event	Company visit (Starting 14:00 p.m.)		
<u>Date</u>	<u>Block</u>	<u>9.00 a.m. – 13.00 p.m.</u>	<u>Readings</u>	
Fri, 9	Machine Learning	Supervised machine learning I	MG* - Chapter 2 (p. 25 – 27)	
Sat, 10	---			
Sun, 11	---			
<u>Date</u>	<u>Block</u>	<u>9.00 a.m. – 12.15 p.m.</u>	<u>Readings</u>	
Mon, 12	Machine Learning	Unsupervised machine learning Wrap-up & Q&A	MG* - Chapter 3 (p. 131 – 134)	
Tue, 13	Machine Learning	Evaluation of the prediction model	MG* - Chapter 5 (p. 251 – 252)	
Wed, 14	Recap and team event	Bavarian culture (Starting 15:00 p.m.)		
Thu, 15	<b>Maria Himmelfahrt (Public holiday)</b> <b>Day Trip to Castle Neuschwanstein (tba)</b>			
Fri, 16	---			

Sat, 17	---		
Sun, 18	---		
Mon, 19	---		
<u>Date</u>	<u>Block</u>	<u>14.00 a.m. – 17.00 .m.</u>	<u>Readings</u>
Tue, 20	Data Analytics	Data Visualization Data description Statistical analysis	
	General	<u>14.00 a.m. – 17.00 .m.</u>	
Wed, 21	Presentations	Student's presentations (GH/AW)	
Thu, 22	Wrap-up 2 & Q&A	Summary of overall content (GH/AW)	
Fri, 23	Exam	GH/AW	
Sat, 24			
Sun, 25	<u>Departure of participants – 10 a.m. at the latest</u>		

Note that the agenda is preliminary and may be subject to change.

#### References:

\* Andreas C. Müller, Sarah Guido: Introduction to Machine Learning with Python: A Guide for Data Scientists, 1st Edition - MG (Main Textbook)

Bird, Steven; Klein, Ewan; Loper, Edward: Natural Language Processing with Python, First edition, 2009

Géron, Aurélien: Hands-On Machine Learning with Scikit-Learn and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems 1st Edition