



Machine Learning and Data Analytics in Finance and Accounting

Munich, Germany
August 5 - 23, 2019
www.mda-misu.de



Munich 2019

Sessions: August 5 – 23

Session will take place at: University of Munich tba

Patronage



Prof. Dr. Thorsten Sellhorn

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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 Event</u>
Mon, 5	Intro	Introduction to machine learning and its application in finance and accounting (GH/AW)	MG* - Chapter 1 (p. 1 – 4)	MISU Welcome Summer Event 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 Event</u>
Tue, 6	Introduction to Python	Python Basics for Data Science	MG* - Chapter 1 (p. 5 – 11)	2h City Tour by bus 5.00 p.m.
<u>Date</u>	<u>Block</u>	<u>9.00 a.m. – 13:00 p.m.</u>	<u>Readings</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>	<u>MISU Event</u>
Mon, 12	Machine Learning	Unsupervised machine learning Wrap-up & Q&A	MG* - Chapter 3 (p. 131 – 134)	Dachau Memorial Site guided tour 12:45 pm ~ 5:30 pm Geschwister-Scholl-Platz 1
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	Maria Himmelfahrt (Public holiday) Day trip to Castle Neuschwanstein by bus Meeting Time: 7:45 am Departure Time: 8:00 am Geschwister-Scholl-Platz 1		
Fri, 16	---		
Sat, 17	Day trip to the city of Nuremberg by bus Meeting Time: 8:15 Departure Time: 8:30 am Geschwister-Scholl-Platz 1		
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