LV 185.A83 Machine Learning for Health Informatics (Class of 2019)

Study Code: 066 936 Master program Medical Informatics

https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=9468&dsrid=253&key=56089&semester=NEXT

Semester hours: 2.0 h; ECTS-Credits: 3.0; Type: VU Lecture and Exercise

ECTS-Breakdown (sum=75 h, corresponds with 3 ECTS, where 1 ECTS = 25 h workload):

Presence during lecture	8 * 3 h	24 h
Preparation before and after lecture	8 * 1 h	08 h
Preparation of assignments and presentation	28 h + 2	30 h
Written exam including preparation	1 h + 12 h	13 h
TOTAL students' workload		**75 h**

Class URL: https://hci-kdd.org/machine-learning-for-health-informatics-class-2019

Class Schedule for 2019 (subject to change: please check class URL for any changes):

Nr	Day, Date	Time	h	Topic
1	Dienstag 12.3.2019	17:30-20:30	3 h	Machine learning for health informatics: Introduction, challenges and future directions
2	Dienstag 19.3.2019	17:30-20:30	3 h	From clinical decision making to explainable AI: selected methods of transparent machine learning
3	Dienstag 26.3.2019	17:30-20:30	3 h	Tutorial: Predicting Progress of Parkinson's disease with MLP and LIME - FIRST ASSIGNMENT
4	Dienstag 02.4.2019	17:30-20:30	3 h	Probabilistic Graphical Models: from knowledge representation to graph model learning
5	Dienstag 09.4.2019	17:30-20:30	3 h	Tutorial: Probabilistic Programming with Python, Bayesian models, MCMC - SECOND ASSIGNMENT
	Time for working on the assignments			
6	Dienstag 30.4.2019	17:30-20:30	3 h	Data for machine learning: quality, fusion, integration, probabilistic information and entropy
7	Dienstag 07.5.2019	17:30-20:30	3 h	Causality and causal machine learning for decision support, ethical, legal and social issues of AI in health
	Finalization of assignments, reports due to Dienstag, 21.5.2019 EOD			
8	Dienstag 28.5.2019	17:30-20:30	3 h	Final exam (written test, 40 %) and presentations of the assignments (orally, 10 %) quality of the assignments 25 % each (coding, 50 %)