Instructor: Assoc.Prof. Dr. Andreas HOLZINGER, contact: a.holzinger AT tugraz.at

LV 706.046 AK HCI 2019: Human-AI-Interfaces

Semester hours: 3.0 h; ECTS-Credits: 5.0; Type: VU

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
Working on the Mini-Projects	84 h	84 h
Presentation in the Mini-Conf including preparation	3 h + 6 h	09 h
TOTAL students' workload		**125 h**

Class URL: https://hci-kdd.org/intelligent-user-interfaces-2019

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

Nr	Day, Date	Time	h	Topic
1	Montag 11.3.2019	14:00-16:15	3 h	Introduction and Overview: Ante-hoc vs. post-hoc explainability, the need for affective user interfaces; from measuring usability to measuring causability.
2	Montag 18.3.2019	14:00-16:15	3 h	Methods of ex-AI (I): LIME, BETA, LRP, Deep Taylor Decomposition, Prediction Difference Analysis; Presenting of Mini-Projects, group formation and selection
3	Montag 25.3.2019	14:00-16:15	3 h	Methods (II): Visualizing CNN with DCNN, inverting CNN, guided backpropagation, deep generator nets, TCAV
4	Montag 01.4.2019	14:00-16:15	3 h	(III): Understanding the model: Feature visualization, deep vis, RNN cell state analysis, fitted additive, iML
5	Montag 08.4.2019	14:00-16:15	3 h	(IV): Sensitivity Analysis, Gradients for explanation, DeepLIFT, Grad-CAM, integrated gradients, Presenting the Mini-Project topics for a better mutual understanding
	Mini-Projects: Time for working on the mini-projects			
6	Montag 29.4.2019	14:00-16:15	3 h	Mid-Term presentation of Mini-project status
7	Montag 06.5.2019	14:00-16:15	3 h	Feedback-and-Discussion Round
8	Montag 13.5.2019	14:00-16:15	3h	Pre-Presentation of Mini-Project Results, Final Feedback Round
	Completing the paper and preparation for MiniConf			
8	Montag 17.6.2019	14:00-16:15	3 h	MiniConf (written paper, 50 %) and oral presentation (talk, 25%), final written test (25%)

706.046 AK Mensch-Maschine-Kommunikation: Applying User-Centered Design