Affective Signals SS 2021 - Outline

Nr.	Date	Topic	Perspective	Papers for presentation
1	15.04.2021	Course Introduction: Topics & Requirements		
2	22.04.2021	Preparation for Hands-On-Sessions and Theoretical Overview		
3	29.04.2021	Facial Expressions I	Psychology - Teaser	
			Technical Background	*OpenFace 2.0: Facial Behavior Analysis Toolkit*
4	06.05.2021	Facial Expressions II	Implementation: Hands-on	
			Application	*Deep learning-based classification of posttraumatic stress disorder and depression following trauma utilizing visual and auditory markers of arousal and mood*
	13.05.2021	HOLIDAY		
5	20.05.2021	Eyes I	Psychology - Teaser	
			Technical Background	*Rendering of eyes for eye-shape registration and gazeestimation.*
6	27.05.2021	Eyes II	Implementation: Hands-on	
			Application	*DeepVision: Deepfakes Detection Using Human Eye Blinking Pattern*
	03.06.2021	HOLIDAY		
7	10.06.2021	Voice I	Psychology - Teaser	
			Technical Background	*openSMILE – The Munich Versatile and Fast Open-SourceAudio Feature Extractor*
8	17.06.2021	Voice II	Implementation: Hands-on	
			Application	*Using Speech to Predict Sequentially Measured Cortisol Levels During a Trier Social Stress Test*
9	24.06.2021	Heart Beat I	Psychology - Teaser	
			Technical Background	*Using Contactless Heart Rate Measurementsfor Real-Time Assessment of Affective States (starting from page 158)*
10	01.07.2021	Heart Beat II	Implementation: Hands-on	
			Application	*Automatic human stress detection based on webcam photoplethysmographic signals*
11	08.07.2021	Breathing	Psychology - Teaser	
			Technical Background	*Respiratory Rate Estimation from Face Videos*
12	15.07.2021	Breathing II	Implementation: Hands-on	
			Application	*Non-contact monitoring of respiration in the neonatal intensive care unit*
13	22.07.	Biases (Cultural & Gen	Psychology - Teaser	
			Technical Paper I	*Investigating Bias and Fairness in FacialExpression Recognition*
			Technical Paper II	*Gender de-biasing in speech emotion recognition*