# When AI Meets Human Science:

The 4<sup>th</sup> Tohoku - NTU Symposium on Interdisciplinary AI and Human Studies

Time: March 12-13, 2021 Location: On Zoom Registration required. https://forms.gle/YoG6ocYkEqd3afrj9

## Friday, March 12

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Time	Speaker	Topic	
09:25 - 09:30 (TW) 10:25 - 10:30 (JP)		Opening Remark	
Session 1 (Chai	r: Yoshihiko Horio)		
	Takumi Ito	Langsmith: An Interactive Academic Text Revision System	
09:30 - 10:30 (TW)	Tai-Li Chou	Neural Substrates of Communication Deficits in Autism	
10:30 - 11:30 (JP)	Sachiko Kiyama	How Poems Bring Joy? Some Neural Changes to the Japanese Fixed Verses	
	Hsiu-Ping Yueh	Reshaping Learning Experience with Robot	
10:40 - 11:40 (TW) 11:40 - 12:40 (JP)		Discussion Session 1	
Lunch Break			
13:00 - 13:55 (TW) 14:00 - 14:55 (JP)	Masayuki Ohzeki	Keynote Speech: Quantum Annealing and its Application to Real Industry	
Session 2 (Chair: Jun Saiki)			
	Po-Jang Hsieh	The Scientific Study of Human Consciousness	
14:00 - 15:00 (TW)	Sae Kaneko	Temporal Factor of Spatial Context for Visual Perception	
15:00 - 16:00 (JP)	Ryo Teraoka	Is the Spatial Shape of Auditory Selective Attention Constant in the Horizontal Plane?	
	Seiji Kumagai	Using Traditional Wisdom with Al (Buddhabot) to Establish a "Psyche Navigation System"	
Session 3 (Chair: Li-Chen Fu)			
	Yoshihiro Sugaya	Indoor Navigation using an Illustrated Non-digital Map on Information Board	
15:00 - 16:00 (TW)	Shih-Fang Chen	Intelligent Tea Management: What AI Can Help	
16:00 - 17:00 (JP)	Satoshi Moriya	Modeling of Cultured Neuronal Networks for Analog Hardware Implementation	
	Shang-Tse Chen	Robust Physical Adversarial Attack on Object Detectors	
16:10 - 17:10 (TW) 17:10 - 18:10 (JP)		Discussion Session 2 & 3	

## Saturday, March 13

	lime	Speaker	Topic
	Case Western R	Reserve University and	Tohoku University Special Session
		Mistuyuki Nakao	Opening Remark
	08:00 - 11:00 (TW) 09:00 - 12:00 (JP)	Yinghui Wu	Knowledge-based Event Analysis in Cyber- Physical Data Streams
		Mehmet Koyutürk	Robust Inference of Kinase Activity Using Functional Networks
		Roger H. French	Spatiotemporal Graph Neural Network for Performance Prediction of Photovoltaic Power Systems
		Masayoshi Adachi	Crystal growth of AIN from Ni-Al solution
		Samy B. Mohammad	Pedagogical Methods of Online Practical- based Learning in Data Science
		Nei Kato	Ten Challenges in Advancing Machine Learning Technologies towards 6G

#### Lunch Break

### Session 4 (Chair: Yoshifumi Kitamura)

13:00 - 14:00 (TW) 14:00 - 15:00 (JP)		Fu-Cheng Wang	Recognition of Stroke Gaits by Deep Neural Networks
	13:00 - 14:00 (TW)	Kazuyuki Fujita	Adaptive Workspaces: Physically Interacting with Spatial Surfaces
	Ruey-Feng Chang	Breast Ultrasound Computer Aided Diagnosis Using Deep Learning	
		Yoshiyuki Ueda	Experience and Environmental Matters in Human Visual Cognition

#### Session 5 (Chair: Keng-Chen Liang)

	Hirokazu Hatta	Implicit Attitudes toward Dishonesty as a Predictor of Self-serving Dishonesty
14:00 - 15:00 (TW)	Ching-Mei Chu	Building Emotion-centered Al: How Humanistic Sociologists Can Help Break the Bottleneck of Al's "Emotional Intelligence"
15:00 - 16:00 (JP)	Pin-Hao Chen	Towards a Neurometric-based Construct Validity of Trust
	Yueh-Hsuan Weng	When ELSI meets Design: On Design-centered Al Governance
15:00 - 16:00 (TW)	Discussion Session 2 & 3	
16:00 - 17:00 (JP)		
16:00 - 16:55 (TW)	Wendy Cho	Keynote Speech: Human-centered Redistricting
17:00 - 17:55 (JP)	Automation in the Age of Al	









16:55 - 17:00 (TW)

17:55 - 18:00 (JP)



**Closing Remark**