

2022 SYDE Graduate Symposium – June 23, 2022 – Faculty Hall (E7-7303/7363)		
Time	Presenter	Session Title
9:00 AM to 9:30 AM		Coffee
9:30 AM to 11:00 AM		Chair: Alex Wong Image & Signal Analysis
9:30 AM	Matthew Bradley	Towards Viewpoint-Free Visual Place Recognition
9:45 AM	Yuan Fang	Deep Image Prior for Disentangling Mixed Pixels
10:00 AM	Gauri Sharma	Automatic Assembly Machine Part Spatiotemporal Segmentation Using External Observers
10:15 AM	Amir Nazemi	An online continual learning model for video object segmentation
10:30 AM	Natarajan Vaidyanathan	Neural Adaptive Filter - A biologically plausible estimation mechanism to control nonlinear systems with delay
10:45 AM	Ali Asghar	Fusion of Estimated Depth and RGB Features for Improved Grasp-Type Selection of Novel Objects
11:00 AM to 11:15 AM		Break
11:15 AM to 12:30 AM		Chair: Nima Maftoon Biomedical Engineering
11:15 AM	Elahe Cheraghi	Lightweight and Flexible Bismuth Oxide Composite with Enhanced X-Ray Shielding Efficiency
11:30 AM	Alkris Warren	Development of an all-optical forward-viewing photoacoustic remote sensing endoscope for high resolution label-free imaging
11:45 AM	Ali Nasr	Design and Control of Active-passive Shoulder Exoskeleton Robot
12:00 PM	Hajar Abedifirouzjaei	Autonomous Gait Detection and Analysis Using Electromagnetic Waves
12:15 PM	Nargess Heydari Beni	Heartbeat detection from the upper arm: a step towards developing wearable devices for cardiac activity monitoring
12:30 PM to 1:30 PM		Lunch: Industry Keynote Speakers
12:50 PM	Robert Bowerman	Chief Technical Officer, Kognitiv Corp.
1:10 PM	Deitra Sawh	Manager, Risk Control Operations, Ontario Financing Authority
1:30 PM to 3:00 PM		Chair: Tais Sigaeva Human Factors
1:30 PM	Marco A Moran-Ledesma	Interactive Training Tool for Injury Assessment of a Human Joint
1:45 PM	Wendy Ding	Prediction of Situation Awareness and Takeover Performance using Eye Tracking Features in a Semi-Autonomous Vehicle Simulator
2:00 PM	Ebru Emir	Evaluation of Laban Effort Features based on the Social Attributes and Personality of Domestic Service Robots
2:15 PM	Hyun Su Seong	Examining Computer-Generated Speech for Aeronautical English Accent Testing and Training
2:30 PM	Fatemeh Karimi	Freezing of Gait: Biomarkers, Detection, and Prediction using EEG
2:45 PM	Siti Nandiroh	Effect of the Six Basics of Emotions and Neutrality on Trust and Dependence on Operators in the Petrochemical Industry
3:00 PM to 3:20 PM		Break
3:20 PM to 4:20 PM		Chair: Shi Cao Systems Modelling and Simulations
3:20 PM	Muna Alateibi	Top-Down vs Bottom-Up Modeling and Simulation of Grey-, Green-, and De-Growth for The Natural Resources' Dependent Economies
3:35 PM	Mariam Lahlou	Interaction Forces of Coupled Magnetic Pendulums

3:50 PM	Keaton Inkol	Model-Based Simulation and Control of Upright Balance in Lower-Limb Exoskeletons
4:05 PM	Arash Ebrahimian	Stochastic Finite-Element Modelling and Global Sensitivity Analysis of Human Middle Ear