

Room E7-7303		
Time	Presenter	title
9:00 to 9:30AM		Coffee
9:30 to 11:10 AM		Chair/Evaluator: E. Abdel-Rahman/ T. Willett Biomedical - I
9:30 AM	Jing Wei	Using A Novel Wristband to Measure Circadian Rhythm and Sleep from Three Groups of People
9:50 AM	Ahmed Raza Malik	Development of a Portable Seat Cushion for Heart Rate Monitoring Using Ballistocardiography
10:10 AM	Zohreh Hosseinaee	System design and image processing algorithms for achieving cellular level resolution in optical coherence tomography images
10:30 AM	Ben Lambert	Real-time Focused Transcranial Ultrasound Effect on Electroencephalographic Sensory Evoked Potentials
10:50 AM	Mohsen Diraneyya	Full-body Inverse Dynamics Tool for Generic Motion Captured using Inertial Measurement Units
11:10 AM to 12:00PM		Lunch
12:00 to 1:40 PM		Chair: S. Cao / Evaluator: S. Samuel Human Factors
12:00 PM	Murat Dikmen	The Effects of Algorithmic Transparency on Awareness, Trust, Usage and Satisfaction in Online Socio-Technical Systems
12:20 PM	Leila Homaieian	Investigating the Impact of Data Transfer User Interfaces on Communication Grounding in Cross-Device Collaborative Environments
12:40 PM	David Qin	Design of External Displays on Autonomous Vehicles for Safe Pedestrian Crossings
1:00 PM	Apurva Misra	Cognitive Driver Distraction Detection
1:20 PM	Andrew Cen	Designing a new method of text input in virtual and augmented reality (VR and AR) space
1:40 to 2:00PM		Break
2:00 to 4:00 PM		Chair: S. Cao / Assessor: C. Eliasmith Biomedical - II
2:00 PM	Kateryna Morayko	Exploration of Behaviors Associated with the Default Network in the context of Video Game Play
2:20 PM	Karan Shastri	Designing and Determining Needs for Technology for Supporting People Living with Mild Cognitive Impairment/Dementia at Work
2:40 PM	Harjot Singh Parmar	Using Design And Artificial Intelligence To Augment An Electronic Medical Record System
3:00 PM	Sujan Subendran	Predicting Peritoneal Dialysis Catheter Insertion Related Outcomes using Machine Learning Methods
3:20 PM	Aravind Ravi	Enhancing the Detection of Steady State Visual Evoked Potential Based Brain Computer Interfaces (SSVEP BCI)
3:40 PM	Sardar Elias	Feedback-Based Interface Design to Reduce Driver Impatience at Traffic Intersections

Room E7-7363		
Time	Presenter	title
9:00 to 9:30AM		Coffee
9:30 to 11:10 AM		Chair: G. Savage / Evaluator: J. Zelek Vision & Image Aalysis
9:30 AM	Matthew Post	Radiometric Compensation of nonlinear Projector-Camera Systems for the Human Visual System
9:50 AM	Manpreet Singh Minhas	Anomaly Detection in Images
10:10 AM	Dino Kabiljagic	Resolution-enhanced Digital Epiluminescence Microscopy Using Deep Computational Optics
10:30 AM	Georges Younes	A Unified Formulation for Visual Odometry
10:50 AM	Jason Deglint	Analysis of the Automatic Classification of Algae using Computational Multispectral Fluorescence Microscopy and Hierarchical Deep Learning
11:10:00 AM to 12:00 PM		Lunch
12:00 to 1:40 PM		Chair: C. Eliasmith / Evaluator: N Maftoon Machine Learning & Artificial Intelligence
12:00 PM	Shamak Dutta	Convolutional Neural Networks Regularized by Correlated Noise
12:20 PM	Brent James Komer	Biologically Plausible Model of Spatial Cognition
12:40 PM	Youssef Zaky	Learning Methods for Robotic Grasping
1:00 PM	Erik Kolbjorn Lloyd	Applications of Deep Learning for the Classification of Novel Hand Gestures for Prosthetic Control
1:20 PM	Saeedeh Lohrasbi	Multi-Lane Adaptive Cruise Control for Autonomous Driving using Deep Reinforcement Learning
1:40 to 2:00 PM		Break
2:00 to 4:00 PM		Chair: G. Heppler / Evaluator: N Maftoon Mechatronics
2:00 PM	Steven Lee	A Safe Model of Path Planning in Dynamic Highway Environments Using Harmonic Functions
2:20 PM	Hadi Mohammadi Daniali	Nonlinear Model Predictive Control of Quadrotors for Real-time Applications
2:40 PM	Sina Alighanbari	Optimal Control of Connected and Automated Plug-in Hybrid Electric Vehicles at Roundabouts
3:00 PM	Seyed Mohammad Hosseini	Designing Intelligent Energy Management and Cost-effective Data Acquisition System for Vehicular Solar Idle Reduction Systems
3:20 PM	Chen Chen	A Novel Triboelectric Energy Harvester for Wireless Energy Transfer and Communication in Ultrasonic Link
3:40 PM	Ayman Alneamy	Electrostatic Micro Arch Tweezers