BGU-ECE Symposium 2018

Monday, May 14, 2018, Sonnenfeldt Auditorium

9:15 Coffee and registration

9:50 Opening

10:00 Keynote: How to shape and code symbols for high-rate communications? Prof. Gerhard Kramer, Technical University of Munich, Germany

11:00 Break

11:30 Video, Image & Audio Processing

Barkan Hall

11:30 Erez Farhan, Region expansion: context aware point matching and affine transformation estimation
12:10 Erez Posner, Motion segmentation using locally affine randomized voting
12:30 Yoram Furth, Who needs segmentation for hyperspectral detection?
12:50 Yaniv Tocker, Real time background-foreground separation based on robust spatial prediction
13:10 Eran Miller, Spatial sound perception using mixed order spherical harmonics

11:30 Physical Electronics

Senate Hall

11:30 Martin Mellincovsky, Reliability and physical dimensions enhancement of AC-connected power electronic systems by active reduction of electrolytic capacitance
12:10 Shahar Edelstein, A novel yellow laser based on stimulated Raman scattering in gas filled hollow-core fibers
12:30 Nathaniel Hai Mirilashvili, Molecular and optical interactions understanding in organic semiconductors via novel dispersion model
12:50 Gilad Marco, Light trapping in sub-wavelength CPC arrays
13:10 Almog Refael Azulay, Self-assembled super-lattice nanowire growth

11:30 Estimation and Detection

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11:30 Eyal Nitzan, Estimation theory with side information for periodic and constrained problems
12:10 Omer Faybish, Background estimation in hyperspectral images for target detection
12:30 Nadav Harel, Low complexity methods for estimation after parameter selection
12:50 Elad Meir, Selective Cramér-Rao bound for estimation after model selection
13:10 Assaf Dvora, Hyperspectral target detection using semi-parametric methods

13:30 Lunch

14:30 Awards ceremony

15:00 Radar, communication and networking

Senate Hall

15:00 Nir Regev, Applications of the micro-Doppler effect in radar
15:40 Andrey Gurevich, Effective algorithms for sequential anomaly detection
16:00 Tal Krotman Haroeh, Cognitive radar for UAV detection
16:20 Chen Firestein, Effective constitutive parameters evaluation for meta-materials with highly interaction fields
16:40 Boris Zadov, Magnetic Field Sensors Based on Piezoelectric-Magnetostrictive Layered Structures: Theory, Design and Realization

15:00 Machine Learning

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15:00 Ron Shoham, Sequential deep learning
15:20 Alon Tairy, Large scale machine learning methods applied to object recognition in multidimensional geospatial imaging
15:40 Assaf Livne, Underwater object detection and classification: using forward looking sonar and convolutional neural networks
16:00 Gal Rattner, Layerwise adaptation of deep RNNs for text prediction
16:20 Nave Algarici, Speaker recognition using recurrent neural networks
16:40 Moshe Abuhasira, Target detection using unclassified learning methods

The symposium is free of charge, but early registration is required at: https://goo.gl/BKDp6M