Monday = 10th

Neural Networks, Machine Learning

Monday	M1	M1-1	Meta learning of bounds on the Bayes classifier error	Kevin Moon; Véronique Delouille; Alfred Hero III
		M1-2	The Performance Limit for Distributed Bayesian Estimation with Identical One-Bit Quantizers	Xia Li; Jun Guo; Uri Rogers; Hao Chen
		M1-3	Randomized Robust PCA for High Dimensional Data Matrices	Mostafa Rahmani
		M1-4	Highly Accurate Palmprint Recognition Using Statistical and Wavelet Features	Shervin Minaee; AmirAli Abdolrashidi
		M1-5	Iris Recognition Using Scattering Transform and Textural Features	Shervin Minaee; AmirAli Abdolrashidi
		M1-6	Reduced Dimensionality, Information Rich Visual Representations for Scene Classification	Kaveri Thakoor
		M1-7	Studying the relationship between physical and language environments of children: Who's speaking to whom and where?	Abhijeet Sangwan; John Hansen; Dwight Irvin; Stephen Crutchfield; Charles Greenwood

SP Education

	M1	M1-8	Introductory Signal Processing Course Offered Across the Curriculum	Andreas Spanias
		M1-9	Real-Time DSP Basics Using Arduino and the Analog Shield SAR Codec Board	Mark Wickert
		M1-10	Hands-on Software Defined Radio Experiments with the Low-cost RTL-SDR Dongle	Mark Wickert; McKenna Lovejoy
		M1-11	An Inquiry-based Acoustic Signal Processing Lab Module for Introducing Digital Communications	Andrew G. Klein
		M1-12	Question Review Model For Q&A Systems	Greg Krudysz; James H McClellan
		M1-13	Developing an Educational Electro-Mechanical Model of the Middle Ear and Impulse Noise Reduction Algorithm for Cochlear Implant Users	John Hansen
		M1-14	Nine C Programming Labs to Turn Students into Filtering and Signal Analysis Experts	Jake Gunther; Todd Moon

Digital Signal Processing

	M1	M1-15	A Comparative Study Of Commuting Matrix Approaches For The Discrete Fractional Fourier Transform	Ishwor Bhatta; Balu Santhanam
		M1-16	Wideband-FM Demodulation for Large Wideband to Narrowband conversion factors Via Multirate Frequency Transformations	Wenjing Liu; Balu Santhanam

SP for Communications

	M2	M2-1	Practical Insights on Full-Duplex Personal Wireless Communications Gained from Operational Experience in the Satellite Environment	Glenn Collins
		M2-2	Doubly Weighted DFT-Based Feedback Codebook Design For Orthogonal Space-Time Block Codes	Juinn-Horng Deng; Sheng-Yang Huang; Jeng-Kuang Hwang
		M2-3	Fast Detection of OFDM systems using Graphical Models	Seare Rezenom; Fambirai Takawira
		M2-4	Real-Time Rate-Adaptable Coding for Fading Channels	Sam Schmidt; Willie K Harrison
		M2-5	Tail Shortening by Virtual Symbols in FBMC-OQAM Signals	Fang Wang; Daiming Qu; Tao Jiang; Behrouz Farhang-Boroujeny
		M2-6	An Autoregressive Model for a single-hop Relay channel	Tadesse Ghirmai
		M2-7	Applying Metropolis-Hastings-Within-Gibbs algorithm for data detection in relay-based communication system	Tadesse Ghirmai
		M2-8	Optimal Non-coherent Data Detection for Massive SIMO Wireless Systems: A Polynomial Complexity Solution	Haider Alshamary; Tareq Y. Al-Naffouri; Alam Zaib; Weiyu Xu
		M2-9	Impact of Timing and Frequency Offsets on Multicarrier Waveform Candidates for 5G	Amir Aminjavaheri; Arman Farhang; Ahmad RezazadehReyhani; Behrouz Farhang-Boroujeny
		M2-10	Relay misbehavior detection for robust diversity combining in cooperative communications	Tsang-Yi Wang; Po-Heng Chou; Wan-Jen Huang

Adaptive Methods for Estimation, Compression, Fusion and Control

	M2	M2-11	Impact of Common Observations in Parallel Distributed Detection	Hao Chen; Tsang-Yi Wang
		M2-12	Using Extended Kalman Filter for Robust Control of a Flying Inverted Pendulum	D. Maughan; Ishmaal Erekson; Rajnikant Sharma
		M2-13	Adaptive Likelihood Codebook Reordering Vector Quantization for 1-D Data Sources	Chu Meh Chu; Nathan Parrish; David Anderson
		M2-14	Generating Laplace Process With Desired Autocorrelation from Gaussian AR processes	Tadesse Ghirmai
		M2-15	Coherent Combination of Signals From Diverse Sensors	Todd Moon; Jake Gunther; McKay Bonham; Gustavious P Williams
		M2-16	Evaluating the performance of Max Current AC-DCT based colored Digital Image Fusion for Visual Sensor Network's	Arun Begill; Shruti Puniani; Kamaljot Singh; Navjot Kaur

Tuesday = 11th

Signal Processing Applications: Finance, Radio Astronomy, Radar

Tuesday	T1	T1-1	Spectral Analysis of Stock-Return Volatility, Correlation, and Beta	Shomesh Chaudhuri; Andrew W Lo
		T1-2	Fast Raw Data Simulator of Extended Scenes for Bistatic Forward-looking Synthetic Aperture Radar with Constant	Ziqiang Meng; Yachao Li; Mengdao Xing; Zheng Bao
		T1-3	Analysis to Distinguish Range Deception Jamming with Kernel Local Fisher Discriminant	Sajjad Abazari Aghdam; Mahdi Nouri
		T1-4	The Cross-Ambiguity Function for Emitter Location and Radar - Practical Issues for Time Discretization	James Schatzman
		T1-5	You're Crossing the Line: Localizing Border Crossings Using Wireless RF Links	Peter Hillyard; Neal Patwari; Samira Daruki; Suresh Venkatasubramanian
		T1-6	Compensating for Oversampling Effects in Polyphase Channelizers: A Radio Astronomy Application	John Tuthill; Grant Hampson; John Bunton; Frederic j harris; Andrew Brown; Richard Ferris; Timothy Bateman
		T1-7	Multi-Tier Interference-Cancelling Array Processing for the ASKAP Radio Telescope	Richard A Black; Brian D. Jeffs; Karl Warnick; Gregory Hellbourg; Aaron Chippendale
		T1-8	A Reconfigurable Optically Connected Beamformer and Correlator Processing Node for SKA	Grant Hampson; John Tuthill; Andrew Brown; John Bunton; Timothy Bateman
		T1-9	Cancelling non-linear processing products due to strong out-of-band interference in radio astronomical arrays	Yifeng Wu; Richard A Black; Brian D. Jeffs
		T1-10	Subspace smearing and interference mitigation with array radio telescopes	Gregory Hellbourg

Compressive Sensing and Reconstruction

	T1	T1-11	Approximate Regularization Paths for Nuclear Norm Minimization Using Singular Value Bounds	Niclas Blomberg; Cristian Rojas; Bo Wahlberg
		T1-12	Learning Anomalous Features via Sparse Coding Using Matrix Norms	Bradley Whitaker; David Anderson
		T1-13	Sparse Recovery Using an SVD Approach to Interference Removal and Parameter Estimation	Charles Hayes; James H McClellan; Waymond R Scott, Jr.
		T1-14	Multi-Frame Super-Resolution for Mixed Gaussian and Impulse Noise based on Blind Inpainting	Ismael Silva; Boris Mederos-Madrazo; Leticia Ortega Maynez; Sergio D Cabrera
		T1-15	Polarimetric target decomposition based on sparse attributed scattering center base decomposition	Jia Duan; Lei Zhang; Yifeng Wu
		T1-16	Fast Imaging In Cannula Microscope Using Orthogonal Matching Pursuit	Ahmad Zoubi; Kishan Supreet Alguri; Ganghun Kim; V. John Mathews; Rajesh Menon; Joel Harley
		T1-17	On The Block-Sparsity Of Multiple-Measurement Vectors	Mohammad Shekaramiz; Todd Moon; Jake Gunther
		T1-18	Dynamic Model Generation for Application of Compressed Sensing to CRYO-Electron Tomography Reconstruction	Sally Wood; Ernesto Fontenla; Christopher Metzler; Wah Chiu; Richard Baraniuk

Spectral Estimation, Array Processing, Signal Separation

	T2	T2-1	Parametric spectral signal restoration via maximum entropy constraint and its application	Hai Liu; Zhaoli Zhang; Sanya Liu; Jiangbo Shu; Tingting Liu
		T2-2	A new method for determination of instantaneous pitch frequency from speech signals	Abhay Upadhyay; Ram Bilas Pachori
		T2-3	Source Localization with Sparse Recovery for Coherent Far- and Near-Field Signals	Ahmet M Elbir; T. Engin Tuncer
		T2-4	Direction Finding and Localization for Far-Field Sources with Near-Field Multipath Reflections	Ahmet M Elbir; T. Engin Tuncer
		T2-5	Shrinkage estimation of spectral matrices: A EEG analysis centered approach	Deborah Schneider-Luftman
		T2-6	Memory Efficient Spectral Estimation on Parallel Computing Architectures	Michael Barjenbruch; Franz Gritschneder; Jens Klappstein; Juergen Dickmann; Klaus Dietmayer
		T2-7	Blind Non-negative source recovery in under-determined mixtures	Tianliang Peng; Yang Chen
		T2-8	Extracting The Fundamental Frequency of a Nonlinear Chirp Signal with Modulated Harmonic Structure Using ML, Target Tracking, and the Viterbi Algorithm	Todd Moon; Jake Gunther; Gustavious P Williams

SP Education

	T2	T2-9	Using the ARM Cortex-M4 and the CMSIS-DSP Library for Teaching Real-Time DSP	Mark Wickert
		T2-10	Using the IPython Notebook as the Computing Platform for Signals and Systems Courses	Mark Wickert; McKenna Lovejoy
		T2-11	DSP Education by Fixed-Point Implementation & Measurement	Jorge Cadena; A. A. (Louis) Beex
		T2-12	The Lab-in-a-box Project: An Arduino Compatible Signals And Electronics Teaching System	William Esposito; Fernando A Mujica; Domingo Garcia; Gregory T.A. Kovacs
		T2-13	Teaching Digital Signal Processing with Stanford's Lab-in-a-Box	Fernando A Mujica; William Esposito; Alex Gonzalez; Charles R Qi; Christopher Vassos; Maisy Wieman; Reggie Wilcox; Gregory T.A. Kovacs; Ronald Schafer
		T2-14	Using smartphones as mobile implementation platforms for applied digital signal processing courses	Nasser Kehtarnavaz
		T2-15	Leveraging Student Knowledge of DSP for Optical Engineering	Cameron Wright; Thad B. Welch; Michael Morrow

			Wednesday = 12th	
			Image Processing, Video Processing, Hyperspectral and Multispectral Image Processing	
Wednesday	W1	W1-1	Face Recognition in Vehicles with Near Infrared Frame Differencing	Jinwoo Kang; David Anderson; Monson Hayes
		W1-2	Signal Processing Techniques for Enhancing Multispectral Images of Ancient Documents	Trace Griffiths; Gene Ware; Todd Moon
		W1-3	Eigen-gap of Structure Transition Matrix: A New Criterion for Image Quality Assessment	Mohsen Joneidi; Mostafa Rahmani; Hossein Bakhshi Golestani; Mohammad Ghanbari
		W1-4	Image Loss Concealment Using Edge-Guided Interpolation and Multi-scale Transformation	Bahareh Langari; John Stonham; Alireza Mousavi
		W1-5	A Practical Strategy for Spectral Library Partitioning and Least-Squares Identification	Shawn Higbee
		W1-6	Temperature Emissivity Separation: Estimation with a Parameter Affecting Both the Mean and Variance of the	Todd Moon; David Neal; Jake Gunther; Gustavious P Williams
		W1-7	Body markers detection based on 3D video processing oriented to children gait analysis	Mario Chacon; Carlos Avalos; Omar Arias
			Neural Networks, Machine Learning	
	W1	W1-8	A neural bio-inspired scheme for head pose recognition	Mario Chacon; Huber Orozco; Juan Ramirez
		W1-9	Mapping Arabic Acoustic Parameters to Their Articulatory Features Using Neural Networks	Yousef A Alotaibi; Yasser M Seddiq
		W1-10	A Novel Method for Blind Segmentation of Thai Continuous Speech	Siripong Potisuk
		W1-11	Deep Emotion Recognition using Prosodic and Spectral Feature Extraction and Classification based on Cross Validation and	Ayush Sharma; David Anderson
		W1-12	Traffic Flow Forecasting Research Based on Bayesian Normalized Elman Neural Network	Wenchi Ma