2011 IEEE International Workshop on Recent Advances in

Cognitive Communications and Networking (RACCN)

Houston, Texas, USA, 5 December 2011

For presenters:

Each paper will have 20 minutes, in which 15 minutes for presentation and 5 minutes for questions.

Workshop Program:

* Session 1: Spectrum sensing in cognitive radio networks (Session Chair: Ming Yu)

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| 8:00-8:20 | *Further Results on the Energy Detection of Unknown Deterministic Signals Over Generalized Fading Channel* | [Oluwatobi O Olabiyi](http://edas.info/showPerson.php?p=580011&c=10877) (Prairie View A&M University, USA); [Shumon Alam](http://edas.info/showPerson.php?p=580013&c=10877) (Prairie View A&M University, USA); [Olusegun O. Odejide](http://edas.info/showPerson.php?p=184609&c=10877) (Prairie View A&M University, USA); [Annamalai Annamalai](http://edas.info/showPerson.php?p=251732&c=10877) (Prairie View A&M University, USA) |
| 8:20-8:40 | *Collaborative Spectrum Sensing Based on the Ratio Between Largest Eigenvalue and Geometric Mean of Eigenvalues* | [Muhammad Zeeshan Shakir](http://edas.info/showPerson.php?p=182619&c=10877) (King Abdullah University of Science and Technology, Saudi Arabia); [Anlei Rao](http://edas.info/showPerson.php?p=587505&c=10877) (King Abdullah University of Science and Technology, Saudi Arabia); [Mohamed-Slim Alouini](http://edas.info/showPerson.php?p=516696&c=10877) (KAUST, Saudi Arabia) |
| 8:40-9:00 | *Proposal and Hardware Implementation of Smart Threshold Setting Methods for Spectrum Sensing* | [Chunyi Song](http://edas.info/showPerson.php?p=87619&c=10877) (National Institute of Information and Communications Technology, Japan); [Mohammad Azizur Rahman](http://edas.info/showPerson.php?p=98153&c=10877) (National Institute of Information and Communications Technology, Japan); [Hiroshi Harada](http://edas.info/showPerson.php?p=122935&c=10877) (National Institute of Information & Communications Technology (NICT), Japan) |
| 9:00-9:20 | *Licensed Receiver Detection and Authentication in Simplex Licensed Networks* | [Chao Zou](http://edas.info/showPerson.php?p=227937&c=10877) (Michigan Tech, USA); [Chunxiao (Tricia) Chigan](http://edas.info/showPerson.php?p=2373&c=10877) (Michigan Tech, USA) |
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**9:30—10:00 Morning Coffee Break**

* Session 2: Protocol Designs in Cognitive Networks (Session Chair: Nirwan Ansari)

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| 10:00-10:20 | *Analysis of TCP Throughput in Cognitive Radio Networks* | [Jian Wang](http://edas.info/showPerson.php?p=649367&c=10877) (Zhejiang University, P.R. China); [Aiping Huang](http://edas.info/showPerson.php?p=89301&c=10877) (Zhejiang University, P.R. China); [Wei Wang](http://edas.info/showPerson.php?p=150017&c=10877) (Zhejiang University, P.R. China); [Zhaoyang Zhang](http://edas.info/showPerson.php?p=109555&c=10877) (Zhejiang University, P.R. China); [Vincent Lau](http://edas.info/showPerson.php?p=185890&c=10877) (The university of science and Technology, Hong Kong) |
| 10:20-10:40 | *Impedance Matching Based Cross-Layer Architecture for Cognitive Networks* | [Rong Li](http://edas.info/showPerson.php?p=503340&c=10877) (Beijing University of Posts and Telecom, P.R. China); [Zhiyong Feng](http://edas.info/showPerson.php?p=149385&c=10877) (Beijing University of Posts and Telecommunications, P.R. China); [Peng Yin](http://edas.info/showPerson.php?p=503342&c=10877) (Beijing University of Posts and Telecom, P.R. China); [Ying Wang](http://edas.info/showPerson.php?p=503076&c=10877) (Beijing University of Posts and Telecomm, P.R. China) |
| 10:40-11:00 | *A Cross-layer Selfishness Avoidance Routing Protocol for the Dynamic Cognitive Radio Networks* | [Kiam Cheng How](http://edas.info/showPerson.php?p=309157&c=10877) (Nanyang Technological University, Singapore); [Maode Ma](http://edas.info/showPerson.php?p=131830&c=10877) (Nanyang Technological University, Singapore); [Yang Qin](http://edas.info/showPerson.php?p=9862&c=10877) (HIT Shenzhen Graduate School, P.R. China) |
| 11:00-11:20 | *Joint Routing and Resource Allocation for Delay Sensitive Traffic in Cognitive Mesh Networks* | [Amr El-Sherif](http://edas.info/showPerson.php?p=168001&c=10877) (Alexandria University, Egypt); [Amr Mohamed](http://edas.info/showPerson.php?p=258613&c=10877) (Qatar University, Qatar); [Y. Charlie Hu](http://edas.info/showPerson.php?p=86200&c=10877) (Purdue University, USA) |
| 11:20-11:40 | *Modeling and Analysis of CogNet Architecture for Cognitive Radio Networks* | [Suyang Ju](http://edas.info/showPerson.php?p=271503&c=10877) (University of Kansas, USA); [Joseph B. Evans](http://edas.info/showPerson.php?p=12640&c=10877) (University of Kansas, USA) |
| 11:40-12:00 | *Optimal Presence Detection of Improper-Complex Second-Order Cyclostationary Random Signal for Spectrum Sensing in Cognitive Radio* | [Jeong Ho Yeo](http://edas.info/showPerson.php?p=271211&c=10877) (Pohang University of Science and Technology (POSTECH), Korea); [Joon Ho Cho](http://edas.info/showPerson.php?p=13194&c=10877) (Pohang University of Science and Technology (POSTECH), Korea) |

**12:00—13:30: Lunch Break**

* Session 3: Resource allocation in cognitive radio networks (Session Chair: Wei Liu)

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| 13:30-13:50 | *Real-Time TVWS Trading Based on a Centralized CR Network Architecture* | [Athina Bourdena](http://edas.info/showPerson.php?p=550707&c=10877) (University of the Aegean, Greece); [Evangelos Pallis](http://edas.info/showPerson.php?p=581411&c=10877) (Technological Educational Insitute of Crete, Greece); [Georgios Kormentzas](http://edas.info/showPerson.php?p=87347&c=10877) (University of the Aegean, Greece); [Harry Skianis](http://edas.info/showPerson.php?p=90327&c=10877) (University of the Aegean, Greece); [George Mastorakis](http://edas.info/showPerson.php?p=273435&c=10877) (Technological Educational Institute of Crete, Greece) |
| 13:50-14:10 | *Game-Theoretic Channel Selection for Interference Mitigation in CRNs with Block-Fading Channels* | [Yuhua Xu](http://edas.info/showPerson.php?p=504957&c=10877) (Institute of Communications Engineering, PLA University of Science and Technology, P.R. China); [Qihui Wu](http://edas.info/showPerson.php?p=406465&c=10877) (PLA University of Sci. & Tech., P.R. China); [Jinlong Wang](http://edas.info/showPerson.php?p=397738&c=10877) (PLA University of Science and Technology, P.R. China); [Gao Zhan](http://edas.info/showPerson.php?p=247405&c=10877) (Institute of Communications Engineering, P.R. China); [Alagan Anpalagan](http://edas.info/showPerson.php?p=13795&c=10877) (Ryerson University, Canada) |
| 14:10-14:30 | *Learning-based Dynamic Channel Selection for Opportunistic Spectrum Access* | [Chin-Wen Chou](http://edas.info/showPerson.php?p=468168&c=10877) (HTC, Taiwan); [Kate Ching-Ju Lin](http://edas.info/showPerson.php?p=453341&c=10877) (Academia Sinica, Taiwan) |
| 14:30-14:50 | *Coalitional Game Formulation for Multi-Channel Cooperative Cognitive Radio Networks* | [Yu-Wei Chan](http://edas.info/showPerson.php?p=375619&c=10877) (National Tsing Hua University, Taiwan); [Ronald Y. Chang](http://edas.info/showPerson.php?p=148622&c=10877) (Academia Sinica, Taiwan); [Feng-Tsun Chien](http://edas.info/showPerson.php?p=12645&c=10877) (National Chiao Tung University, Taiwan); [Min-Kuan Chang](http://edas.info/showPerson.php?p=90889&c=10877) (National Chung Hsing University, Taiwan); [Yeh-Ching Chung](http://edas.info/showPerson.php?p=10089&c=10877) (National Tsing Hua University, Taiwan) |
| 14:50-15:10 | *Reciprocal Spectrum Sharing Game and Mechanism in Cellular Systems with Cognitive Radio Users* | [Pin-Yu Chen](http://edas.info/showPerson.php?p=465358&c=10877) (National Taiwan University, Taiwan); [Weng Chon Ao](http://edas.info/showPerson.php?p=418532&c=10877) (National Taiwan University, Taiwan); [Shih Chun Lin](http://edas.info/showPerson.php?p=417592&c=10877) (National Taiwan University, Taiwan); [Kwang-Cheng Chen](http://edas.info/showPerson.php?p=3812&c=10877) (National Taiwan University, Taiwan) |
| 15:10-15:30 | *Spectrum Map Retrieval Using Cognitive Radio Network Tomography* | [Chung-Kai Yu](http://edas.info/showPerson.php?p=239387&c=10877) (Graduate Institute of Communication Engineering, National Taiwan University, Taiwan); [Kwang-Cheng Chen](http://edas.info/showPerson.php?p=3812&c=10877) (National Taiwan University, Taiwan) |

**15:30—16:00 Afternoon Coffee Break**

* Session 4: Performance of cognitive radio networks (Session Chair: Ming Yu)

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| 16:00-16:20 | *Effect of the Primary User Traffic on Cognitive Relaying with Adaptive Transmission* | [Anlei Rao](http://edas.info/showPerson.php?p=587505&c=10877) (King Abdullah University of Science and Technology, Saudi Arabia); [Hao Ma](http://edas.info/showPerson.php?p=650977&c=10877) (King Abdullah University of Science and Technology, Saudi Arabia); [Mohamed-Slim Alouini](http://edas.info/showPerson.php?p=516696&c=10877) (KAUST, Saudi Arabia); [Yunfei Chen](http://edas.info/showPerson.php?p=13978&c=10877) (University of Warwick, United Kingdom) |
| 16:20-16:40 | *Queue Performance Measures for Cognitive Radios in Spectrum Sharing Systems* | [Abdallah K Farraj](http://edas.info/showPerson.php?p=154137&c=10877) (Texas A&M University, USA); [Scott Miller](http://edas.info/showPerson.php?p=11202&c=10877) (Texas A&M University, USA); [Khalid A. Qaraqe](http://edas.info/showPerson.php?p=146869&c=10877) (Texas A&M University at Qatar, USA) |
| 16:40-17:00 | *Performance Evaluation of Multiband Multi-Sensor Spectrum Sensing Systems* | [Che Kang Liang](http://edas.info/showPerson.php?p=619703&c=10877) (Queen's University, Canada); [Steven D Blostein](http://edas.info/showPerson.php?p=88147&c=10877) (Queen's University, Canada) |
| 17:00-17:20 | *A Geographically Homogeneous Mesh Grouping Scheme for Broadcast Cognitive Pilot Channel in Heterogeneous Wireless Networks* | [Zhiqing Wei](http://edas.info/showPerson.php?p=467168&c=10877) (Beijing University of Posts and Telecommunications, P.R. China); [Zhiyong Feng](http://edas.info/showPerson.php?p=149385&c=10877) (Beijing University of Posts and Telecommunications, P.R. China) |
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