
The 36th IEEE Sarnoff Symposium 2015
September 20-22, 2015, Newark, New Jersey, USA

Sponsored by IEEE Princeton/Central Jersey Section
IEEE Region 1
<http://ewh.ieee.org/conf/sarnoff/2015>

Call for Papers
Submission Deadline (Extended): June 30, 2015

ABOUT IEEE SARNOFF

Since 1978 the IEEE Sarnoff Symposium has been bringing together a rich diversity of telecom and communications experts from industry, universities, and government. The Sarnoff Symposium continues to grow as the premier forum for researchers, engineers, and business executives in the northeastern United States drawing an attendance from all over the world. Besides technical sessions, the Symposium will include invited sessions, tutorials, student poster presentations, executive panels, and exhibitions.

SCOPE

The Symposium is soliciting state-of-the-art research papers, panels and tutorial proposals including, but not limited to, the following topics:

Wireline Communication Systems

- * Cloud and data center networks
- * Software-Defined Networks
- * Core network architectures and protocols
- * Metro and access networks
- * Storage networks
- * Power line communication networks
- * Architectures for high-performance router and switches
- * Network architectures for the Smart Grid
- * Grid networks
- * Timing and synchronization for wireline communications systems

Optical Communications and Networking

- * WDM Systems and Devices
- * Broadband Access Communications
- * Radio over Fiber (RoF)
- * Convergence of optical and wireless access networks

Networking

- * Datacenter Communications
- * Network Virtualization and Cloud Computing
- * Cloud Computing
- * Switching and Routing
- * Network Security

Wireless Communications Systems

- * 3G, 4G, and LTE-A systems
- * 5G Roadmap, Architecture and Challenges
- * WiFi and WiMAX Systems
- * MIMO Transmission Schemes
- * Hierarchical Networks (Small Cell, Femto, Pico, Relays)
- * Radio Resource and Interference Management

- * Self Configuring and/or Optimizing Networks (SON)
- * Sensor, Mesh and Ad Hoc Networks
- * Ultra Wideband (UWB) Communications
- * Power Management and Green Communication
- * Satellite Communication Systems
- * Military Communication Systems
- * Disruption Tolerant Networks
- * Ad hoc mobile networks
- * Sensor networks and embedded systems
- * Wireless body area networks
- * Wireless access networks
- * Machine-to-machine Communications
- * Mobile backhaul networks
- * Mobility models and mobile networks
- * Next generation mobile/wireless networks
- * Networks for Internet-of-Things
- * Optical wireless (free space optics)
- * Radio access networks
- * Wireless grid networks
- * Wireless local and personal area networks
- * Wireless mesh networks
- * Wireless opportunistic networks
- * Near field communications
- * Timing and synchronization for wireless communications systems

Wireless Communications Components

- * Power Amplifiers, RF Repeaters
- * Microwave Devices
- * Antennas Design
- * VLSI for Communications
- * Transceiver

Communications and Information Theory

- * Network Information Theory
- * Cross-Layer Optimization Schemes
- * Cognitive Radio
- * Multi-terminal Source Coding

Applications

- * Cyber-physical systems and networks
- * Energy-Efficient Green networking and Sustainability
- * M-Health, E-Health and Smart Health-care
- * Data and File sharing
- * Smart grid
- * Trust, Security, and Privacy
- * Embedded Analytics
- * Middleware services
- * Network virtualization
- * Localization services
- * IPTV, Video-on-Demand, Telepresence, Collaboration tools
- * Online social networking
- * Peer-to-peer networks
- * Smartphone networked applications and social networks
- * Standardization
- * Telecom service assurance
- * Triple-play architectures and applications
- * Multimedia Applications for Mobile and Tethered Users

- * Mobile Payment Applications
 - * Business Models for Mobile Applications
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SUBMISSION GUIDELINES:

(1) **TECHNICAL PAPERS:** Authors must submit their papers using EDAS (<http://edas.info/newPaper.php?c=19009>) on or before June 30, 2015. All papers will be blind-reviewed for technical content and scope by a technical program committee. Accepted and presented papers will be published in the conference proceedings and submitted to IEEE Xplore as well as other Abstracting and Indexing (A&I) databases.

The page limits are SIX (6) pages for the long paper track and THREE pages for the short paper track. Papers should be in PDF format, two columns, font size 10 or greater and compliant with other IEEE SARNOFF manuscript guidelines.

Submitted papers must be unpublished and not currently under review for any other publication. Authors of accepted papers must sign an IEEE copyright release form and also present their paper at the conference to be included in IEEE Xplore.

(2) **TUTORIALS:** Proposals are solicited from domain experts to cover current topics directly relevant to the conference such as (but not limited to): Cloud and Data Center Networks, IPTV, Video-on-Demand, Smartphone Networked Apps, Software Defined Networking (SDN), Information Centric Networking, Wireless Networks, Optical Networks, etc. Proposals must provide an in-depth survey of a chosen topic with the option of describing a particular piece of work in detail and a meaningful summary of open issues in the topic. Proposed tutorials should be comprehensive, informative, and appealing to SARNOFF 2015 attendees.

Each tutorial will be for 3.5 hours with a half-hour break. Tutorial instructors must make a commitment to prepare the tutorial materials (e.g., slides) reflecting high quality standards. All tutorials will be featured prominently in the conference program.

Each tutorial proposal should have: (i) A 1-page abstract that includes: Title of the tutorial, Name and affiliation and a short biography of the instructor(s), Description of the tutorial scope, Intended audience; and (ii) A description at most 2 pages long that includes: Main topics (preferably with some description) to be covered during the tutorial; if relevant, a description of real-world systems, experiences and/or case studies, details of the new knowledge/perspectives gained by the audience attending the tutorial.

Tutorial proposals should be directly EMAILED to the Tutorial Co-Chair, Aleksandar Kolarov (akolarov@appcomsci.com), by June 30, 2015.

(3) **PANELS:** Proposals are solicited from domain experts to cover current topics directly relevant to the conference such as (but not limited to): vertical networking applications, ecosystems for enterprise, datacenter and mobile networks, etc. Panel proposals should contain the Panel Title, Scope, Lead Panelist and a list of 3-4 Panel Members; proposals should be directly EMAILED to the Panel Co-Chair, Ashutosh Dutta (ad37@caa.columbia.edu), by June 30, 2015.

(4) **STUDENT POSTER FORUM:** A 2-page extended abstract describing the research work (preferably work-in-progress and/or planned) must be submitted. The abstracts are to be directly EMAILED to the Student Poster Forum Co-Chair, Lijun Qian (qianlijun@gmail.com), by June 30, 2015.

(5) **EXHIBIT/DEMOS:** IEEE SARNOFF 2015 will include exhibit/demonstration sessions that shall provide a forum to present and discuss: industry/academia demonstrations of new products, applications and techniques, and practical implementations; industrial and commercial developments, research testbeds and implementations.

A 3-page extended abstract describing the main contributions of the exhibits/demo and the merits of the proposed ideas must be submitted. Demonstration submissions should include the space, power, network

connectivity requirements and/or any other equipment-specific requirements. The documents must contain the authors' names, affiliations, contact information and the designated corresponding author. Proposals will be evaluated mainly based on their potential to stimulate interesting discussions, exchange of ideas and promote collaborations.

The proposal must be directly EMAILED to the Exhibit/Demo Co-Chair, Wenjia Li (wli20@nyit.edu), by June 30, 2015.

IEEE and IEEE Communications Society Policies:

All IEEE SARNOFF technical papers must be associated with an author registration at the FULL rate. For authors presenting multiple papers, one FULL registration is valid for up to three papers. IEEE reserves the right to exclude a paper from distribution after the conference (e.g., removal from IEEE Xplore) if the paper is not presented at the conference.

Important Dates:

* Paper submissions: **June 30, 2015**

* Tutorial, Panel, Exhibits/Demos, Student Poster Forum Submissions: **June 30, 2015**

* Notification of acceptance: **July 10, 2015**

* Camera-Ready Paper Submission and Author Registration: **July 31, 2015**
(For Technical Paper, Exhibit/Demo and PhD Student Forum)

* Early-bird Registration Ends: **August 3, 2015**

* Conference dates: **September 20-22, 2015**

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