

The IEEE CommSoft E-Letter

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IEEE
ComSoc
CommSoft TC

Officer Introduction

As chair of the CommSoft technical committee, I am happy to introduce the new edition of the committee e-letter, which follows a new format aiming at better highlighting our member activities; i.e., organized events, technical contributions, etc. Thanks to Prof. Abd-Elhamid Taha and the editorial team for preparing this edition which I am sure will be appreciated by all our members.

We greatly appreciate any feedback on our performance. We are also seeking your input as the type of content you would like to see in this e-letter. Meanwhile, we hope you consider the e-letter as a venue your contributions, and as well as updates on your activities within the TC.

My thanks to Prof. Hacene Fouchal, who stepped down earlier this year as TC Chair. I would especially like to note Prof. Fouchal's hard work in improving the committee activities. I would also like welcome Dr. Abd-Elhamid Taha, the newly elected Secretary.

Enjoy the e-letter and looking forward to hearing from you.

Sincerely,
Prof. Adlen Ksentini on behalf of the CommSoft Officers



Loon to Adapt Its Balloon Tech for Telesat's Satellite Internet Service

<https://spectrum.ieee.org/tech-talk/aerospace/satellites/loon-partners-with-telesat-to-explore-leo-constellation-networks>

Telesat is planning to deploy hundreds of satellites as part of its LEO (low-earth-orbit) constellation which will provide low-cost Internet access to areas without fast access. To accomplish this, Telesat is working with Alphabet's Loon project to utilize SDN tech used in their Internet delivery balloons, which makes balloons communicate with each other regardless of their location. This technology can work without much modifications with Telesat's satellites.

ETSI Adds 5G-Supporting Features to NFV Architecture

<https://www.mobileeurope.co.uk/press-wire/etsi-adds-5g-supporting-features-to-nfv-architecture>
<https://www.sdxcentral.com/articles/news/etsi-nfv-efforts-gain-more-5g-support/2019/07/>

The NFV specification group of the European standards organization, ETSI, which oversees the standard architecture and specifications of Network Function Virtualization (NFV), has extended its architecture to support 5G-related features in NFV Release 3. The extension is a result of a collaboration between ETSI's NFV and the 3GPP SA5 groups (telecom management). The release includes support for network slicing, management over multi-administrative domains, and multi-site network connectivity. In more detail, 3GPP's own management system will interact with ETSI's Management and Orchestration (MANO) system for managing several virtualized components of the core network.

Cisco Announces New AI and Machine Learning Capabilities

<https://www.intelligentcio.com/me/2019/07/09/cisco-announces-new-artificial-intelligence-and-machine-learning-capabilities/>

Cisco announced new software enhancement to allow for understanding network behaviour and predict issues using Artificial Intelligence and Machine Learning. The new features will allow more visibility and insight into the network. Cisco's systems continuously collect data from the network and compare it to an aggregated dataset to create personalized baselines to compare to. ML helps alert admins to the most relevant issues and also automate troubleshooting workflows. These features are integrated into Cisco's SD-Access, and SD-WAN technologies.

It's a Cloud, but Not as We Know It

<https://cacm.acm.org/news/237958-its-a-cloud-but-not-as-we-know-it/fulltext>

LyteLoop, a new startup, is working to develop revolutionary cloud storage that is unlike any cloud service known today. The idea is to store data using modulated laser beams and keep it continuously getting reflected between satellites in orbit. The goal is to reduce the need for expensive datacenters for storing data, and free data from its physical locations and make it hard to find their actual storage locations to maximize security.

Updates on SIG Activities

To date, the CommSoft TC has five SIGs, as listed below

SIG	Coordinator	Coordinator Email
Communication Software for Vehicular Ad hoc Networks	H. Fouchal	Hacene.Fouchal@univ-reims.fr
NFV and SDN Technologies	A. Ksentini	adlen.ksentini@eurecom.fr
Security in Software Communication	Y. Saaverda & J. Ben-Othman	jbo@univ-paris13.fr
Big Data Communication Software	Hassine MOUNGLA	hassine.moungla@parisdescartes.fr
Performance Evaluation	Abdellatif Kobbane	abdellatif.kobbane@um5.ac.ma

Members interested in joining any of the standing SIGs are to contact the respective SIG coordinator. Members interested in establishing new SIGs can consult the TC chair.

CommSoft for VANETs reported the following activities.

- H. Fouchal was keynote speaker at International Conference on Distributed Computing and Internet Technology (ICDCIT'19). Keynote discussed security issues over VANETs.
- H. Fouchal also served as CSSMA symposium chair at GC'19.
- SIG also reported involved in the European project on Cooperative Intelligent Transport Systems
 - Scoop@F and InterCor (to end 2020)
 - New project in InDID on Autonomous Vehicles in 5G

NFV and SDN Technologies reported the following activities.

- JSAC Series on Network Softwarization
 - Fourth call more than 100 submissions
- DLT Tours by Adlen Ksentini on 5G and network softwarization in:
 - South America: Bolivia, Colombia
 - Kingdom of Saudi Arabia

Security in Software Communications reported the following activities.

- IEEE ComSoc DLT
- China: Beijing, Harbin, Xi'an, Nanjing
- ME: Bahrein, Dubai, Kuwait, KSA
- Keynote ICCIP 2018, Qingdao, China, Nov. 2018
- Keynote ICCSIT 2018, Paris, Dec. 2018
- Two SIs with IEEE Communications Magazine
- Keynote VITECON, Velore India, March 2019
- Keynote ICCNP 2019, Nice, France April 2019
- Keynote ICCSN 2019, Chongqing, June 2019

Performance Evaluation reported the following activities

- IWCMC 2019, Tangiers Morocco, 25-28 June
- TPC Chair
 - IEEE 5G Summit 24 June 2019
 - WINCOM 2019, Fez, 28-30 October
 - IEEE IoT Summit 01 November 2019
 - School on “Performance Evaluation : A game theory approach”, 23-28 December 2019
- Invited Keynote speaker
 - Resources management in 5G networks: A game theory approach, First School on Game Theory and Applications for Big Data, Cloud Computing and Cybernetics, ENSA-Oujda, Morocco, 20 December 2018
 - Resources provisioning in 5G mobile communications networks: New trends and challenges, RNJC-SI'18, FST, Fez, 04 December 2018
 - 5G mobile wireless networks: New trend and Challenges, UQAM, 18 September 2018

Member Updates

CommSoft member Nizar Zorba reported success in organizing and holding the 2018 Workshop on Crowd Sensing and Management for Public Safety, which took place in Doha, Qatar on March 17th, 2019.

Further information on the workshop can be found in the following link.

<https://sites.google.com/view/csm-ps2019>



TC Achievement Award

For 2019, the TC is proud to announce awarding its TC Award for 2019 to Prof. Mohsen Guizani (Qatar University, Doha).

The award was presented to Prof. Guizani during the TC meeting at ICC'19 in Shanghai, China, and was made for Prof. Guizani's "outstanding contributions to network softwarization and virtualization".



TC and Newsletter Details

CommSoft TC Mission Statement

To advance the state of the art in communications software and its various aspects and applications. It serves as the major forum for discussion among communications software professionals in both of the communications and computer industries.

Mailing List Information

Join the CommSoft TC mailing list for announcements and updates on the TC's activity as well as its members.

To subscribe, send mail to listserv@listserv.ieee.org with *subscribe commsoft* in the email body (and not the subject line.)

CommSoft on Twitter

Follow CommSoft on twitter using the handle @ieeecomsoft, and mention for announcement retweets.

CommSoft Officers

Post	Name	Affiliation
Chair	Adlen Ksentini	IRISA, France
Vice Chair	Abdellatif Kobbane	University of Rabat, Morocco
Secretary	Abd-Elhamid M. Taha	Alfaisal University, KSA

Liaisons

Entity	Name
Education Board	Adlen Ksentini
Communications Society Student Competition	Abdellatif Kobbane
Standards Board	Abd-Elhamid M. Taha

Newsletter Editor

Abd-Elhamid M. Taha