



May 2019

ISSN 2374-1082

## CONFERENCE REPORT

## IEEE LATINCOM 2018, November 2018, Guadalajara, Mexico

### 10th Anniversary of the IEEE ComSoc Latin-American Conference on Communications

By Carlos A. Gutiérrez, IEEE LATINCOM 2018 General Chair, Univ. Autónoma de San Luis Potosí, Mexico

The IEEE Latin-American Conference on Communications (LATINCOM) reached a milestone last year as it completed its first decade of existence. The City of Guadalajara, in the Mexican State of Jalisco, had the privilege of hosting the conference for such a symbolic occasion.

LATINCOM's journey to Guadalajara began in Medellín, Colombia, back in 2009, with conferences in Bogotá, Colombia (2010), Belém, Brazil (2011), Cuenca, Ecuador (2012), Santiago, Chile (2013), Cartagena de Indias, Colombia (2014), Arequipa, Peru (2015), Medellín, Colombia (2016), and Guatemala City, Guatemala (2017). Since the beginning, the conference's goal has been to provide a platform for researchers and practitioners in Latin America to share R&D results, to meet and to network. The celebration of LATINCOM's 10th anniversary took place from November 14 to 16, 2018. The Organizing Committee sought to maintain the same spirit of previous editions by combining a strong technical program and social activities with a taste of the Tapatia culture.

The anchors of the technical program were the keynote talks delivered by Prof. Joel Rodrigues, from Inatel, Brazil; Prof. Michael Rice, from Brigham Young University (BYU), USA; and Prof. Octavia Dobre, from Memorial University, Canada. Prof. Rodrigues focused his talk on new horizons with the Internet of Things. The talk by Prof. Rice addressed the question of whether single carrier modulation is still alive, or has it faded into oblivion to make way for multicarrier modulation. Finally, Prof. Dobre provided an overview of the enabling technologies and challenges ahead for



Prof. Moe Win giving his tutorial.



The mariachi show during the gala dinner.



Presentation of the Best Paper Award at the closing ceremony. From left to right: Roberto Carrasco (Finance Chair & Treasurer), Carlos Gutiérrez (General Chair), Wellington Lobato Junior (Winner of the Award), Stefano Bregni (IEEE ComSoc Vice-President for Conferences and Member of the LATINCOM Steering Committee), and Javier Vazquez (Operations Chair).

the successful deployment and operation of 5G wireless communication networks. The three talks offered a vision from different perspectives of the fifth generation of mobile cellular communications technology that is starting to be deployed in various Latin American Countries.

In addition to the keynote talks, four tutorials were offered to the conference attendees during the first day of activities, covering topics of current interest, such as the problem of localization for the Internet of Things, next generation satellite networks, visible light communications, and the sixth generation (6G) of WLANs. The tutorials were delivered, respectively, by Prof. Moe Win, from Massachusetts Institute of Technology (MIT), USA; Prof. Sastri Kota, from the University of Oulu, Finland; Prof. Rafael Perez-Jimenez, from Universidad de las Palmas de Gran Canaria; and Associate Professor Roger Hoeffel, from Federal University of Rio Grande do Sul (UFRGS). It is worth mentioning that Prof. Win's tutorial was featured as a sequel to his successful keynote talk delivered during the 9th LATINCOM 2017 in Guatemala City, Guatemala. The tutorials were held on the premises of the University Center of Social Sciences and Humanities of the University of Guadalajara. This academic institution was the main sponsor of LATINCOM 2018. The rest of the activities had a venue in the facilities of a hotel conveniently located in the Expo Zone of Guadalajara, where the world's second largest book fair is held annually.

The technical program also included 71 technical paper presentations; 60 papers were selected for presentation in the regular program of LATINCOM 2018, and 11 papers were presented within the 2018 Latin-American Workshop on Communications.

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## IEEE Communications Society Distinguished Lecturer Tour of Yi Qian in Latin America, August 2018

By Carlos Eugenio Martínez-Cruz, El Salvador IEEE Section Chair, and Yi Qian, IEEE ComSoc Distinguished Lecturer, USA

As part of the ComSoc Distinguished Lecturer Tour (DLT) program, from August 5 through 11, 2018, Professor Yi Qian visited chapters in Chile, Bolivia, and Peru. Four cities were visited, Santiago, La Paz, Cochabamba, and Lima, on August 6, 7, 8 and 10, respectively. The tour included two cities in Bolivia, the country's capital, La Paz, and Cochabamba. Planning started in April 2018 and involved the help of regional director, Lisandro Granville, regional DLT coordinator, Pedro Aguilera, and chapter chairs, Diego Dujovne (Chile), Sandra Hidalgo (Bolivia), and Fredy Campos (Perú).

### SANTIAGO, CHILE

Professor Yi Qian arrived in Santiago de Chile early in the morning on August 6, 2018. He was received and attended by Chile Chapter Chair, Diego Dujovne and by Pedro Aguilera. After having lunch, they took him to Universidad Diego Portales where he gave a one-hour lecture that started at 15:30. The topic was "Security for 5G Wireless Networks." More than 80 people attended the lecture. There was also time for a little bit of tourism and leisure. Professor Yi Qian was taken to dinner in a restaurant at the top of a mountain in Santiago. That location offered beautiful night views of the whole city, with the Andes Mountains in the background. The next day he left Santiago at 7:30 am, heading to La Paz, Bolivia. He spent less than a day in Chile.

### LA PAZ, BOLIVIA

After a three hour flight over the snowcapped mountains and the deserts of the South America highlands, at 10:30 on August 7 he arrived in La Paz, Bolivia. ComSoc Bolivia Chapter Chair San-

dra Hidalgo welcomed him at La Paz International Airport. To be at a very high altitude is always scary. The city is over four kilometers in altitude and its airport is the highest international airport in the world. Ms. Hidalgo took him to the city, through Teleférico La Paz-El Alto, or cable car, where he could enjoy breathtaking views of the whole city and the highlands. He gave two lectures in the same afternoon, at Hotel Casa Grande, La Paz. The talks were given at 16:30 and 20:00, lasting one hour each. In between the lectures another lecture was given by Huawei Technologies. The lectures' titles were "Smart Grid Communication Infrastructures" and "Security for 5G Wireless Networks." They were attended by more than 60 professionals, professors and students. There was time for talking beyond the technical talks, to discuss IEEE technical involvement, volunteering, and professional societies such as IEEE and IEEE ComSoc. The lectures were intended to motivate the attendees to try to maintain their IEEE involvement in the schools and in the rest of their careers.

### COCHABAMBA, BOLIVIA

Wednesday morning, August 8, 2018, Professor Yi Qian took a flight heading southeast to Cochabamba, which is 2,558 meters above sea level surrounded by higher snowcapped mountains. The lecture was scheduled from 15:00 to 18:30, followed by a 30 minute Q&A session. The title of the lecture was "Challenges and Solutions for LTE and 5G Vehicular Communications," which was requested by the IEEE Student Branch from Universidad Privada Bolivia. About 40 people attended this lecture. The audience was very enthusiastic throughout and after the lecture. Professor Yi Qian left Cochabamba early on Thursday morning. The flight to Lima had two stops, in La Paz and in Cuzco.

### LIMA, PERÚ

Professor Yi Qian arrived at Lima International Airport at 13:00, August 9. Arrangement were made by ComSoc Peru Chapter Chair, Fredy Campos, who has a lot of cultural experience and a good sense of humor. This part of the tour provided

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With part of the audience, after my three-hour lecture at Universidad Privada Bolivia, in Cochabamba, 15:00 – 18:30, August 8, 2018.



With part of the audience, after my one hour Keynote Lecture at INTERCON 2018 Conference, at National University of San Marc, in Lima, Peru, August 10, 2018.



## 2nd International Conference on Electrical Engineering and Informatics (ICon EEI 2018), Batam, Indonesia, Oct. 2018

Technically Co-Sponsored by the IEEE ComSoc Indonesia Chapter

By Iswadi Hasyim Rosma, Indonesia

The 2nd International Conference on Electrical Engineering and Informatics (ICon EEI 2018) took place in Batam, Indonesia on 16-17 October 2018. The conference was organized by the Department of Electrical Engineering, Faculty of Engineering, Universitas Riau, Indonesia. To guarantee the quality of the papers, ICon EEI 2018 was technically co-sponsored by the IEEE Indonesia Section and the IEEE ComSoc Indonesia Chapter.

With the theme "Toward the Most Efficient Way of Making and Dealing with Future Electrical Power System and Big Data Analysis," it was attended by more than 100 participants from nine countries. The Technical Program Committee of ICon EEI 2018 accepted 42 papers for oral presentations. All accepted and presented papers were submitted to be included in IEEE Xplore.

The main goal of the conference is to provide a forum and to bring together academicians, professionals, and governments in the fields of electrical power systems, electronics, telecommunication engineering, control engineering, informatics, computer engineering, information technology and other electrical engineering and informatics domains in order to learn about the latest developments in the research findings and share experiences and ideas on how we can all work together to deal with future electric system and big data analysis challenges in the most efficient way.

The conference was divided into three sessions. First, the opening session was started by Dr. Iswadi Hasyim Rosma as the



Opening ceremony. Left to Right: Dr. Razali Ngah, Prof. Mohd Wazir Mustafa, Prof. Riri Fitri Sari, Dr. Rina Pudji Astuti, Prof. Stefano Bregni, Dr. Ari Sandhyavritri, Dr. Iswadi Hasyim Rosma.



From left to right: Dr. Indra Yasri (Moderator), Prof. Riri Fitri Sari (keynote speaker), Dr. Iswadi Hasyim Rosma (General Chair), Prof. Mohd Wazir Mustafa (Keynote speaker) and Dr. Razali Ngah (keynote speaker).

general chair of ICon EEI 2018, who delivered his report to the participants. Prof. Stefano Bregni, IEEE ComSoc Vice President for Conferences, and Dr. Rina Pudji Astuti, Chair of the IEEE ComSoc Indonesia Chapter, gave the opening remarks presenting IEEE ComSoc activities, to encourage participants to get involved and

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## Highlights from RNDM 2018 – 10th Anniversary Workshop on Resilient Networks Design and Modeling

By Jacek Rak, PL, Poul E. Heegaard, NO, and Bjarne E. Helvik, Norway

Longyearbyen, the northernmost city on Earth, located in Svalbard, Norway only 1310 km from the North Pole, was the venue FOR the 10th Anniversary Workshop on Resilient Networks Design and Modeling (RNDM 2018). The event was organized by NTNU, the Norwegian University of Science and Technology, Trondheim, Norway, in cooperation with Gdansk University of Technology, Poland, and was technically co-sponsored by the IEEE Norway Section and by IFIP TC6 WG 6.10.

RNDM 2018 was attended by 30 participants representing 14 countries. The workshop program was organized in a single track. It included presentations of 17 regular papers selected



Left to right: Jacek Rak (Co-Chair of RNDM 2018), Amaro de Sousa and Fabio Barbosa (recipients of the Best Paper Award), Poul E. Heegaard (General Chair of RNDM 2018), John Doucette and Tetsuhei Nakashima-Paniagua, (recipients of the Best Paper Award), and Bjarne E. Helvik (Co-chair of RNDM 2018).

after a detailed review process (with the average number of 4.86 delivered reviews per a submitted paper), several invited papers, and a Keynote Talk by Andres Gonzalez from Telenor, Norway on "Dependability in 5G Networks. An Operator Perspective."

The technical program of RNDM 2018 was organized into eight sessions:

- Network Resilience under Multiple Failures
- Disaster Resilience of Optical Networks
  - Availability Analysis
  - From Security to Resilience
  - Survivability Strategies
  - Theory of Network Resilience
  - End-to-end Resilience
  - Measurement and Management

In particular, the special focus of the presentations was on the protection of communication networks against weather disruptions and disasters, identification of

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A visit of RNDM 2018 participants at Camp Barentz near Longyearbyen.

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The authorship of these papers was the work of researchers from Latin America and other parts of the world, such as the United States, Canada, Spain, France, Germany, Norway, Finland, Italy, Austria, Morocco, Tunisia, and Korea.

The celebrations for LATINCOM's 10th anniversary reached a truly festive tone on Thursday evening during the Gala Dinner. A tasting of local tequila and a showcase of Mexican shawls (rebozos) served as a preamble to the dinner, and the night wrapped up with the cheerful show of a female mariachi.

The conference concluded on Friday afternoon with a brief ceremony during which the winner of the Best Paper Award (BPA) of the IEEE LATINCOM 2018 was announced. The award was presented to Wellington Lobato Junior, Joahannes Costa, Denis Rosário, Eduardo Cerqueira, and Leandro A. Villas, for their paper entitled "A Comparative Analysis of DSRC and VLC for Video Dissemination in Platoon of Vehicles." Prof. Stefano Bregni, ComSoc's Vice President for Conferences and a Member of the Steering Committee of LATINCOM, made use of the word to declare the conference officially closed and to request proposals for organizing LATINCOM 2019.

With the celebrations for the 10th anniversary in the rear view mirror, LATINCOM will continue with its mission of serving as a vehicle for ComSoc to reach out to its members in Latin America, offering them a first-class venue for interacting with their peers. Researchers from other parts of the world are also welcome to participate in the conference, and take the opportunity to have a first-hand experience of the culture, food, tourist attractions, and lifestyle of the region.

## DISTINGUISHED LECTURE TOUR/Continued from page 2

the opportunity to enjoy a Gala Dinner, good food, nice drinks, friendly cheers and toasts, heavy pisco sour and long hours of dancing. The next day, during the morning, there was time to do a little bit of tourism. ComSoc Peru Secretary, Esmeralda Asurza, took Prof. Qian for a half-day tour to the ancient ruins of Pachacamac, about 40 kilometers southeast of Lima.

The lecture lasted one hour from 17:30–18:30 as a Keynote at the INTERCON 2018 Conference. It was given at San Marcos National University. Over 100 people attended the lecture, which was titled "Security for 5G Wireless Networks." There were a lot of interesting questions on 5G, wireless security, and network security. A long and fruitful discussion was established, especially among the young. After the lecture, late Friday afternoon, several laboratories were visited, including telecommunications and computer network.

Friday evening, there was a welcome ceremony. The organizers were Peru Chapter Officers, Fredy Campos, Carlos Velasquez, and Esmeralda Asurza. The gathering included a lively night show, Peruvian folklore on stage, dinner, drinks, and dancing. Professor Qian was driven to his hotel around 3:30 am. He left Lima at 6:50 am, Saturday morning and arrived in the U.S. the same day, August 11.

## ICON EEI/Continued from page 3

enroll as members. The opening and ceremonial remarks were given by Dr. Ari Shandyavetri, the Dean of Engineering Faculty, Universitas Riau, Indonesia.

Second, one of the important successful events at ICon EEI 2018 was the major contribution from world leading keynote speakers, namely: Prof. Mohd Wazir Mustafa, Prof. Riri Fitri Sari and Assoc. Prof. Razali Ngah who presented their speeches in the area of the utility and grid of the future electrical power system, the Internet of Things network, and device to device communication, respectively.

Third, the 42 papers accepted at the conference out of the 74 submitted papers (an acceptance ratio of 56 percent), were presented. These oral presentations were grouped into three major tracks, namely: Track 1–Electrical Power System, Renewable Energy and High Voltage Engineering; Track 2–Electronics, Control System and Telecommunication; and Track 3–Informatics, Computer Science, Computer Engineering, Information Technology.

## RNDM 2018/Continued from page 3

network regions vulnerable to disasters, and schemes of multicarrier collaboration to set up the post-disaster emergency network. Also, resilient routing with geodiversity constraints for disaster scenarios, modelling and assessment of cyber resilience, or resilience of Content Delivery Networks, Software Defined Networks, and other virtualized architectures were addressed from the theoretical and practical perspective.

The Best Paper Award was given to the authors of two papers: "Dual-Failure Restorability of Meta-Mesh Networks" by A. Castillo, T. Nakashima-Paniagua, and J. Doucette from the University of Alberta (Canada) presented by T. Nakashima-Paniagua; and "Topology Design of Transparent Optical Networks Resilient to Multiple Node Failures" by F. Barbosa, A. de Sousa, and A. Agra from the University of Aveiro (Portugal) presented by F. Barbosa.

A special issue of *Networks*, published by Wiley, is being prepared for the extended versions of selected RNDM 2018 papers.

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ISSN 2374-1082