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IEEE ComSoc Latin America Newsletter - April 2021
1 mensaje

Andrea Carrion Herrera <andreakch@ieee.org>　　　　　30 de abril de 2021 a las 18:19
Para: COMSOCR9MEMB@comsoc.org

IEEE ComSoc Latin America Newsletter
April 2021

IEEE ComSoc
IEEE Communications Society
Latin America Region

Interviews with our members

INTERVIEW WITH FABRICIO CARVALHO, COMSOC BOARD

Virtual Distinguished Lecture Program

Andrea Carrión　　　　　　　　　　　　　　Fabricio Carvalho

By Andrea Carrión - Global Communications Newsletter Committee, IEEE ComSoc Latin America Board.

It is a great pleasure to present the section of interviews to ComSoc members of Latin America in our monthly Newsletter. On this occasion, I have the honor to introduce Fabricio Carvalho. In this interview,

Fabricio shares important information about a new initiative. Fabricio is coordinator of the DLT (Distinguished Lecturer Tours) and DSP (Distinguished Speaker Program) programs, which are the most popular programs in Latin America and the Caribbean, because he allows distinguished ComSoc speakers to present their lectures in different countries.

Due to the global health emergency, all IEEE face-to-face events were canceled and the organization of conferences in virtual format was adopted. From ComSoc LA, the DLT and DSP program was transformed into VLT (Virtual Distinguished Lecture).

Andrea: Hi Fabricio, thank you for sharing important information with members. What is the Virtual Distinguished Lecture (VDL) initiative that you lead at ComSoc Latin America about?

Fabricio: The Virtual Distinguished Lecture (VDL) program is an interesting initiative that enables renowned ComSoc lectures from all around the world to share their knowledge, expertise and experiences to ComSoc members.
The original format of the program is called Distinguished Lecturer Program (DLP), in which a Distinguished Lecturer Tour (DLT) is organized when a distinguished lecturer travels to different cities or regions to present their lectures. However, *due to the current pandemic and the travel restrictions all around the world, in 2021 the Distinguished Lecturer Program migrated to a virtual and online format – the Virtual Distinguished Lecture (VDL)*.
There is also the Distinguished Speaker Program (DSP), which intends that current and past distinguished lecturers, ComSoc officers, IEEE Fellows and prominent speakers can present lectures to ComSoc members – as an alternative to the DLT/VDL program. We are currently working to organize this exciting initiative and share some updates very soon.
More information about the DLT program as well as the list of the distinguished lectures from 2020-2021 can be found in the following link.

Andrea: Definitely having the opportunity to meet and share knowledge and learn from the experience of a distinguished speaker through the DLT and DSP program, is a benefit highly valued by members. What do you think are the benefits of transforming the DLT and DSP Program into what is currently VDL Program?

Fabricio: Due to the severe restrictions that we are facing provoked by the pandemic, the distinguished lecturer program migrated to an online format. The goal is to enable ComSoc members to benefit from the knowledge and expertise from the distinguished lectures virtually. In this context, the VDL program makes it possible to attend a lecture organized by your chapter or even by any ComSoc chapter in the world (which was not possible considering the original format). Consequently, the costs to travel to a city and attend a desired lecture are no longer a concern to ComSoc members, and they can remain updated by attending to the lectures that match with their personal and/or professional interest directly from your computer or even your cell phone. Additionally, the virtual distinguished lecturer can spread a larger audience with your lecture being presented virtually.

Andrea: It is important to emphasize that now ComSoc members can be part of all the conferences given by the Distinguished Lecturer and I know that you have a planned agenda.
Can you give us an overview of how the VDL program was organized in the first and second semesters in

2021?

Fabricio: The planning of virtual lectures is managed by ComSoc. The procedure adopted in 2021 is simple: When the calendar is opened to request a lecture, chapter chairs can directly contact a distinguished lecturer that presents a topic that fits with its chapter's interests and try to define a common date for the virtual presentation. When the schedule is confirmed between one or more chapters, we support ComSoc with the necessary approval and confirmation of the proposed lecture. In the first deadline for such requests (March 26, 2021), *we are very glad to inform that ComSoc chapters from Latin America confirmed 16 lectures to be virtually presented during the year*. We have 8 VDL scheduled for the first semester of 2021 and 8 VDL scheduled for the second semester of the year so far. Please see below a timeline with the lectures confirmed for the first semester.
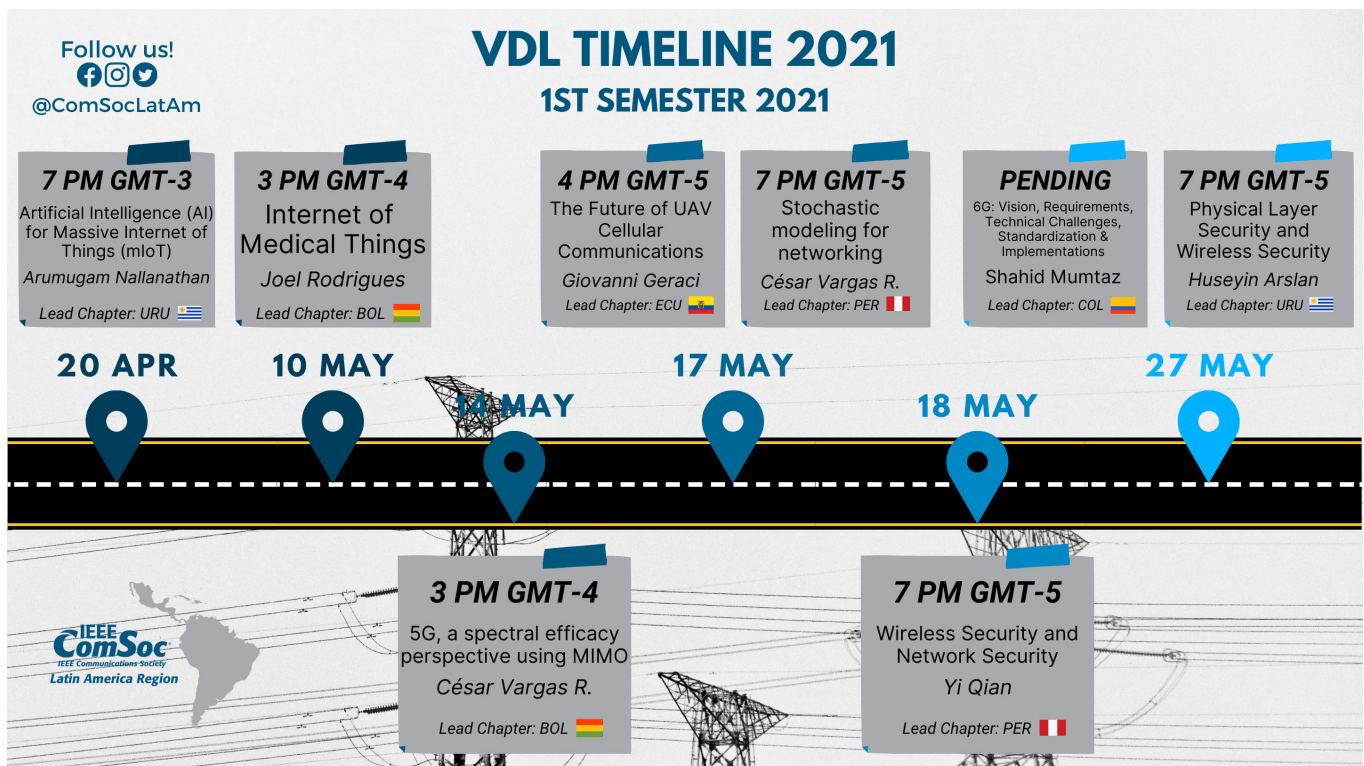
Andrea: Thank you for sharing the VDLs that are coming for the first semester. If a chapter failed to be part of the VDLs program for 2021, can it join as a co-host chapter of the event that already has its VDL confirmed?

Fabricio: *It is important to highlight that a member from any chapter in Latin America can register to attend any lecture scheduled to our region (or even to any lecture planned around the world)*. Additionally, one or more chapters can help with the organization of a VDL that was already scheduled and confirmed in our region. These chapters can contribute with the promotion of a lecture that are valuable to their members; additionally, these chapters may also support with some operational aspects during the planning of the VDL. Finally, we expect that ComSoc authorize the reopening of the VDL request in order to enable more high-level presentations to be organized in our region. As soon as ComSoc confirms that new VDL can be requested we will inform Latin America's chapter chairs.

Andrea: What are the suggestions that you can give to the chapters that already have a confirmed VDL?

Fabricio: First of all, we are very grateful with all the 16 VDL requested by our chapter chairs and confirmed in Latin America in 2021. ComSoc prepared a list of points that must be organized to guarantee an excellent virtual lecture (this list was shared with all chapter chairs). Furthermore, I believe that the promotion of a confirmed VDL is a very important task to the chapter chairs. It is fundamental to let your members know about the topic that will be presented and to highlight the relevance that a class-level presentation like a VDL can aggregate to the formation and the experience of each ComSoc member.

Andrea: Thank you very much Fabricio for sharing important information with ComSoc members, it will surely be very valuable to reserve space on the agenda. Finally, can you extend an invitation to ComSoc LA student and professional members to the confirmed VDLs program conferences during 2021?

Fabricio: We do believe that the *Virtual Distinguished Lecturer (VDL) program is an incredible opportunity to aggregate value to ComSoc membership and to let our members to be updated with the most recent and relevant topics related to the communications field*. Also, the online format makes the program to be much more accessible to any person in the world (having the opportunity to attend a top lecturer in communications directly from your computer or cell phone and Interact with them is fantastic). So, I invite all of you to register and attend the lectures scheduled, and also to invite other members and colleagues to benefit from those top-classes lectures.

What's new at ComSoc LA?

Virtual Distinguished Lecture "Artificial Intelligence (AI) for Massive Internet of Things (mIoT)"

Dr. Arumugam Nallanathan is Professor of Wireless Communications and Head of the Communication Systems Research (CSR) group in the School of Electronic Engineering and Computer Science at Queen Mary University of London since September 2017. His research interests include Artificial Intelligence for Wireless Systems, 5G and beyond Wireless Networks, Internet of Things (IoT) and Molecular Communications. He published nearly 500 technical papers (including more than 200 top IEEE journal papers) in scientific journals and international conferences.

The First Virtual Distinguished Lecture "Artificial Intelligence (AI) for Massive Internet of Things (mIoT)" was made by Dr. Arumugam Nallanathan on April 20th and organized by the ComSoc Chapter of Uruguay.

Cellular-based networks are expected to offer connectivity for massive Internet of Things (mIoT) systems. However, their Random Access CHannel (RACH) procedure suffers from unreliability, due to the collision from the simultaneous massive access. Despite the fact that this collision problem has been treated in existing RACH schemes, these schemes usually organize IoT devices' transmission and re-transmission along with fixed parameters, thus can hardly adapt to time-

varying traffic patterns. Without adaptation, the RACH procedure easily suffers from high access delay, high energy consumption, or even access unavailability.

In this talk it was presented, how to optimize the RACH procedure in real-time by maximizing a long-term hybrid multi-objective function, which consists of the number of access success devices, the average energy consumption, and the average access delay.
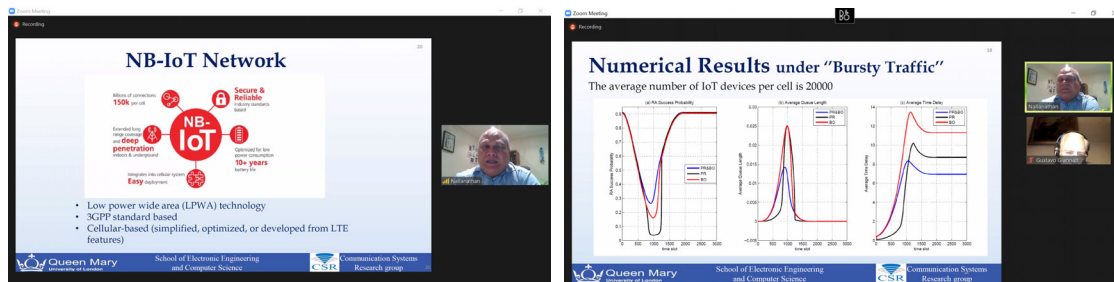

New Senior Members ComSoc LA

We are happy to share that 2 IEEE members of the ComSoc chapter have been promoted to Senior Member for their outstanding track record. The Communications Society congratulates his successful career!

"THIS RECOGNITION IS ONE OF THE MOST IMPORTANT ACHIEVEMENTS OF MY CAREER, IT IS AN HONOR TO HAVE BEEN PROMOTED TO SENIOR MEMBER OF THE PRESTIGIOUS *IEEE.* THIS MEANS A COMMITMENT TO CONTINUE CONTRIBUTING TO SOCIETY AND ACADEMIA THROUGH RESEARCH, DISSEMINATION AND IMPLEMENTATION OF CUTTING-EDGE TECHNOLOGIES IN ORDER TO ACHIEVE AN EFFICIENT ENVIRONMENT FOR THE INTEGRAL DEVELOPMENT OF OUR COUNTRIES, CONTRIBUTING DIRECTLY TO THE EVOLUTION OF INDUSTRY 4.0."

Eng. Andrés Cornejo G., Ph.D
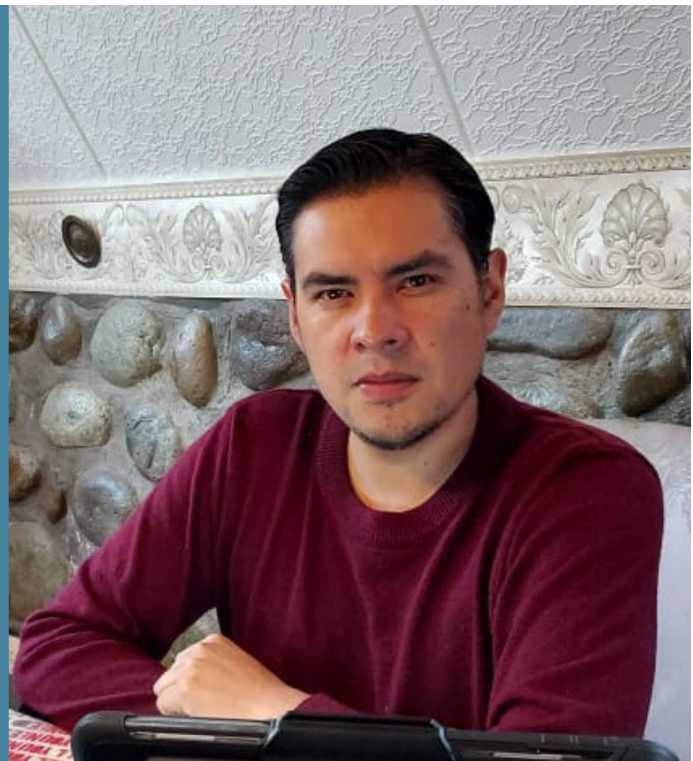
Eng. Andrés Cornejo G., Ph.D

Andres Cornejo received the B.S. degree in Electronic Engineering from Universidad Politecnica Salesiana at Cuenca, Ecuador, in 2008. The Master's degree in Electrical Engineering (Hons.) by the National Autonomous University of Mexico (UNAM), in 2015. He received the Ph.D. in Electrical-Telecommunications Engineering at UNAM, in January 2021. His interest areas and research are HTS next-generation systems, data science applied to satellite systems, satellite networks/satellite architectures, satellite backhaul, evolutionary computation, optimization algorithms, Machine Learning, and Deep Learning applied.

"ELEVATED TO IEEE SENIOR MEMBER IS A SIGNIFICANT MILESTONE IN MY PROFESSIONAL CAREER. IT IS AN HONOR, AND AT THE SAME TIME, IT MOTIVATES ME TO CONTINUE SUPPORTING THE DIFFUSION OF TECHNOLOGIES IN THE ACADEMIC AND THE GENERAL SOCIETY."

Eng. Washington Velasquez, Ph.D

Eng. Washington Velasquez, Ph.D

Washington Velásquez, received a Ph.D. degree in telematics system engineering, a master's degree in telematics services and network engineering from Universidad Politécnica de Madrid, Spain, and an engineer's degree in Telematics from Escuela Superior Politécnica del Litoral, Ecuador. He has published several papers in indexed journals and has led projects related to sensing and networking.

He is an active member of several societies, including IEEE - Institute of Electrical and Electronics Engineers (6 years), IAENG - International Association of Engineers (5 years), IEEE Communications Society (4 years), IEEE Young Professionals (2 years). He works as a Professor of the Faculty of Electrical and Computer Engineering at Escuela Superior Politécnica del Litoral. His research approaches telemetry, remote control, smart cities, and big data.

Upcoming events

"LA Regions Chapter Chairs Meeting 2021"

The ComSoc Latin America Board is pleased to announce the Regional Chapter Chairs Meeting to be held May 2 - 5. *Resources with broad, current and focused content will be offered to chapter chairs. The agenda is now available, add it to your calendar.*

Click to download agenda
Add Google Calendar
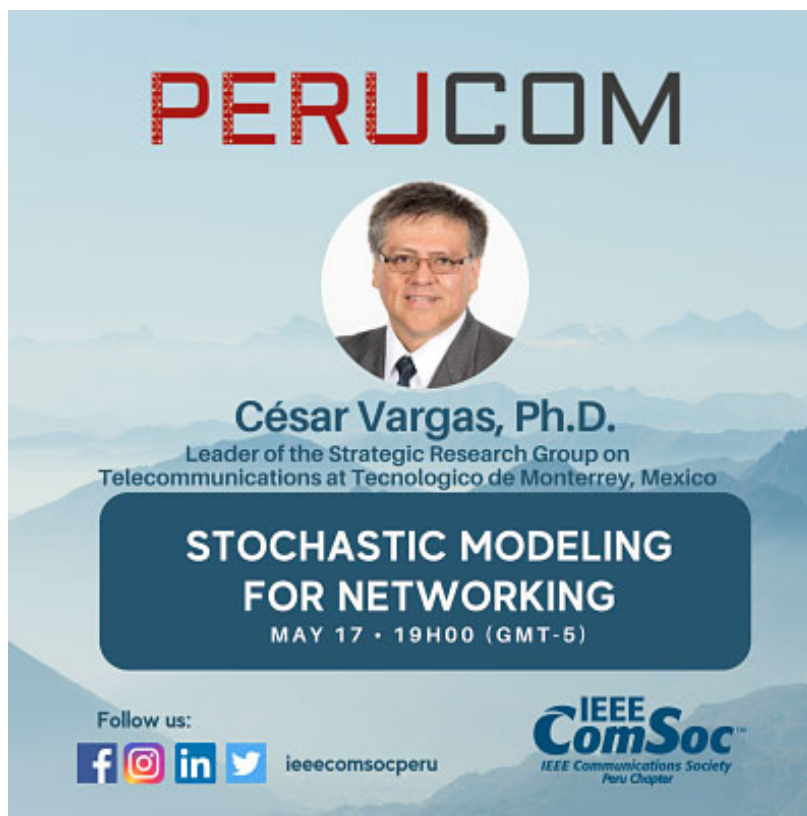
"Stochastic Modeling for Networking"

The problem of evaluating performance, especially on the effects of new and added features to a network will be discussed. The advantages of network measurements will be contrasted with the use of stochastic modeling. *The focus of modeling for networking is on network traffic, so the fundamentals of stochastic modeling will be presented in a retrospective review of methods that have been used and are still used today, together with contemporary ideas that provide the insight of solutions for problems such as network design, optimization, planning and dimensioning.*

Date: *17 May 2021*
Hour: *19h00 to 20h00 (GMT-5)*

Register here

"Wireless and Network Security"

*Network security has been a critical challenge in recent years because the government, military, companies, and individuals rely increasingly on computer networks, systems, and other connected devices to store, communicate, and exchange information. Organizations and individuals transmit sensitive information across communication networks in doing businesses and for other purposes. **In this seminar, Prof. Yi Qian will share with the audience his experience over the last two decades teaching and research in Internet and wireless network security.***

Date: *18 May 2021*
Hour: *19h00 to 20h00 (GMT-5)*

Register here

"The Future of UAV Cellular Communications"

What will it take for UAVs—and the associated ecosystem—to take off? Arguably, ubiquitous high-capacity links paired with hyper-reliable command and control all along. And indeed, meeting these aspirations may entail a full-blown mobile network support. While the understanding of UAV cellular communications has been advancing, many fundamental challenges remain to be addressed, with new applications demanding original solutions. **In this talk, we blend academic and industrial views, navigating from 5G to 6G UAV use cases, requirements, and enabling technologies.**

Date: 17 May 2021
Hour: 16h00 (GMT-5)

Register here

"Physical Layer Security: Latest Trends, Threats, and Countermeasures"

Speaker: Huseyin Arslan

This seminar is intended to provide both introductory theoretical aspects for beginners and advanced technical overview of practical aspects intended for university graduate and undergraduate students, technical professionals in the communications industry, technical managers, and researchers in both academia and industry.

Date: 27 May 2021
Hour: 19h00 (UTC-3)

Register here

IEEE ComSoc Magazines

IEEE Communications Society Magazines in communications and networking

IEEE Communications Society monthly magazines provide researchers and practitioners with current updates of critical developments as well as projections of where technology development will lead the industry.

Current publications include *IEEE Communications Magazine*, *IEEE Network*, *IEEE Wireless Communications*, and *IEEE Communications Standards Magazine.*
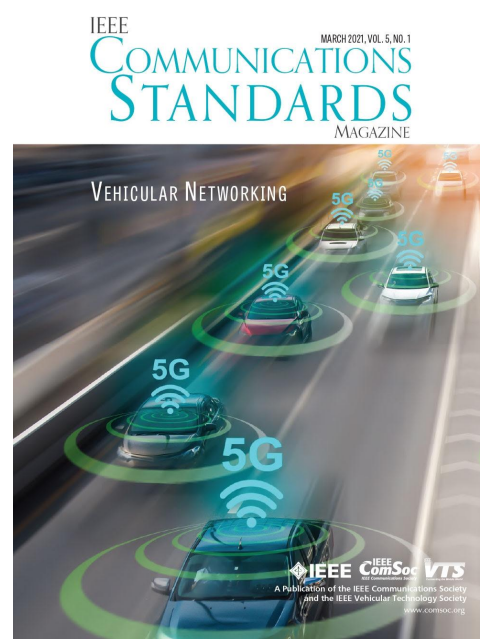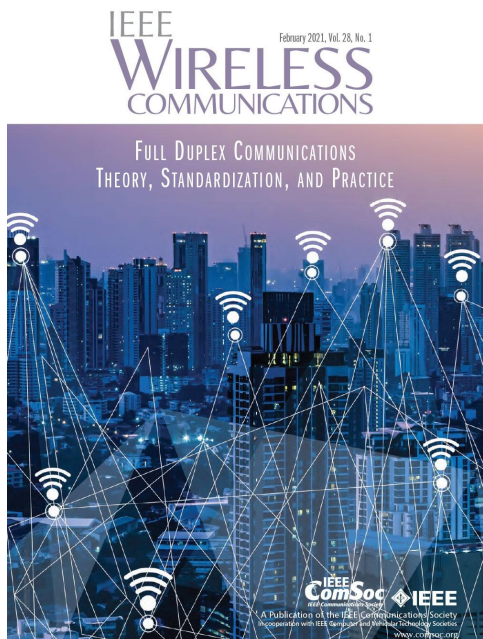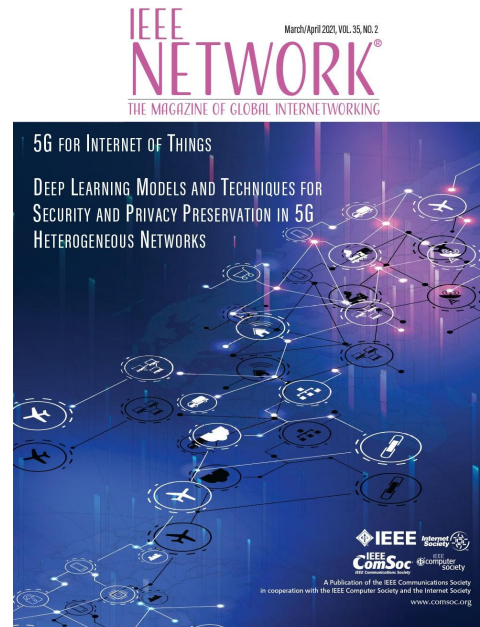
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