



October 2022

ISSN 2374-1082

INTERVIEW

Asia Pacific Region

Interview with Tomoaki Otsuki, Director of the AP Region
by Stefano Bregni, Global Communications Newsletter Editor-in-Chief, Director Conference Operations, and Tomoaki Otsuki, Director of the AP Region

This article continues the series of nine interviews to the Officers of the IEEE ComSoc Member and Global Activities (MGA) Council, which is published every month on the Global Communications Newsletter.

In this series of articles, I introduce the Vice-President and the six Directors on the MGA Council (namely: Member Services, Industry Outreach, and AP, NA, LA, EMEA Regions), as well as the two Chairs of the Women in Communications Engineering (WICE) and Young Professionals (YP) Standing Committees. In each interview, one by one they present their sector activities and plans.

In this issue, I interview Tomoaki Otsuki, IEEE ComSoc Asia Pacific Region Director.

Tomoaki is a professor at the Keio University in Yokohama, Japan. He is the author or co-author of over 235 research papers and 470 international conference papers, in the areas of wireless communications, optical communications, signal processing, sensing, and so on. He is now serving as an Area Editor of the *IEEE Transactions on Vehicular Technology* and an editor of the *IEEE Communications Surveys and Tutorials*. He is a senior member and a distinguished lecturer of the IEEE, a fellow of the IEICE, and a member of the Engineering Academy of Japan.

Tomoaki, we might begin outlining the main characteristics of the AP Region.

The AP Region covers a vast geographical area stretching from South Korea and Japan in the north — east to New Zealand in the south, and Pakistan in the west. With a membership of 107,154, it is one of the largest regions in IEEE. This is roughly 40% of ComSoc members in the world.

Chapters provide a local connection for our society members. Their activities include: talks organized within the Distinguished Lecturer Tour (DLT) or Distinguished Speaker Program (DSP) frameworks, social events, workshops, seminars, special events, etc.

The Distinguished Lecturer Program (DLP) and the Distinguished Speaker Program (DSP) are particularly appreciated by our Members. The AP Region is extremely active also on this program.

DLTs provide the means for ComSoc chapters to identify and arrange lectures by renowned experts on communications and networking-related topics. ComSoc's DSPs enable current and past distinguished lecturers as well as ComSoc officers, IEEE Fellows, and prominent speakers to schedule lectures while traveling on business trips. To cope with the vast geographical area, and related travel costs, of the AP Region, we are emphasizing DLT/DSP.

What about other membership activities in the AP Region?

We also put lots of efforts to promote our membership activities, particularly women in communication engineering (WICE), young professionals (YP), students, and industry activities. We have set up a new team including new WICE and YP committees. Dr. Kaoru Ohta of Muroran Institute of Technology, Japan and Dr. Jemin Lee of Sungkyunkwan University (SKKU), Korea are leading the WICE committee. Dr. Nicholas Wong of Global Foundries, Singapore, and Dr. Yuichi Kawamoto of Tohoku University, Japan are leading the YP committee. They are planning several events and services for WICE and YP members.

Regarding the industry activity, we organized several DLT/DSP by people from industry. Also, we sponsored the 2nd International Future Communications Workshop (2 day online industry-academia joint workshop) that all our member can attend free.

An important facet of the AP activities is our Award Program that includes the AP Young Researcher Award and the AP Outstanding Paper Award. The former one is 17th and the latter one is 11th this year. Many recipients of the AP Young Research Award including me are now contributing a lot to our IEEE the AP Regional Activities.

The AP Region publishes a very detailed Newsletter. May you please tell us a bit about that?

Another important service is our AP Newsletter. We publish 2 AP newsletters a year. We have already published 61 AP newsletters. The AP newsletter contains a lot of useful information for our members including our award programs and other activities, also sometimes tutorial articles.

And what about Students? Do you organize regularly any specific activity for them?

In AP regions, we are also proud that many chapters in our AP regions are very active. They held many events including many events for students. Thanks to their activities, many chapters increased members a lot, including student members. It is important to share the knowhow with other chapters. We hold the event that introduced the knowhow of the chapter that was very active and the chapter award to other chapter members. We are planning to continue this activity.

How do you coordinate the activities of Chapters? Do you meet regularly with Chapter Chairs?

In the AP region we usually had the AP Region Regional Chapter Chairs Congress (AP-RCCC) every 2 years before the COVID-19. The AP-RCCC is the place where all the chapter chairs get together and discuss our activity. It is a very important opportunity to get the opinion and comments from the chairs directly, which contributed a lot to improve our activities. Unfortunately, we have not held AP-RCCC during the COVID-19, but now we are planning to hold it next year in the AP region, possibly at IEEE Globecom 2023 in Kuala Lumpur, Malaysia.

We hope many people will be able to come to the IEEE Globecom 2023!

I am one of the organizers of IEEE GLOBECOM 2023 in Kuala Lumpur and therefore I am extremely happy you have mentioned it. As one of the Technical Program Co-Chairs, I

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Stefano Bregni



Tomoaki Otsuki

wish to take this opportunity to invite all readers to submit a paper to IEEE GLOBECOM 2023 and, certainly, to attend it in person. KL is an outstanding location.

Changing topic, how the AP Region Board collaborates with other professional associations in the Region?

Another important thing in the AP region is that we have many ComSoc Sister Societies. We held many activities including international conferences and workshops with collaboration with the sister societies.

To promote our activities in local countries, it is very important to have such collaboration with sister societies. We are

planning to enhance the collaboration with the sister societies so that we can reach local people more.

To conclude, what are the most serious challenges that you are coping with?

One of our challenges is membership retention. As I mentioned, we have many members in total. However, we have a few Chapters where a significant number of members did not renew the IEEE membership or ComSoc membership. Retention is important for us! We are now investigating the reasons to improve our services to members. We hope we can share our findings with other regions.

INTERVIEW

Communications History: Capturing, Curating and Making Easily Available Interview with Douglas Zuckerman, IEEE ComSoc Communications History Committee Chair

by Stefano Bregni, Global Communications Newsletter Editor-in-Chief, Director Conference Operations, and Douglas Zuckerman, IEEE ComSoc Past President, Communications History Committee Chair

Today, I have the great pleasure to interview Douglas Zuckerman, IEEE ComSoc Communications History Committee Chair. Doug is not only a great friend of mine, but he also helped me a lot during my first days in the ComSoc Board of Governors, when he was ComSoc President and appointed me Director of Education in the already far 2008.

Dr. Doug Zuckerman, an IEEE Life Fellow, is on the IEEE Future Directions and Industry Engagement Committees. He was IEEE Communications Society President and IEEE Board Director. His BS, MS and PhD degrees are from Columbia University (USA). His earlier work at Bell Labs (and successors) heavily influenced network management standards and implementation.

Stefano: Hello Doug! What a pleasure to interview you today. Would you like to begin by introducing what is the Communications History Committee?

Doug: This year marks the 70th anniversary of the IEEE Communications Society, which is its platinum jubilee celebration. This is a singular bit of history, yet could we imagine if we had lost track? What if all the major milestones in communications and in ComSoc had also been either lost or forgotten? Capturing, curating and making easily available this rich history is essential to building and maintaining our professional community. It also helps set a foundation for the future. Thankfully, ComSoc has a standing committee on Communications History, which I currently have the privilege of chairing.

From the Society's Bylaws, "This Committee is responsible for identifying, placing in electronic archives, and raising public awareness through all appropriate means of the most important facts, people, and achievements of communications history, as well as telecommunications milestones in general."

Examples of its activities include solicitation of articles on Communication History for our magazines, organizing communications history sessions at conferences, and commemorating significant anniversaries of the IEEE Communications Society. In 2012, the 60th anniversary of our Society, the Committee organized the updating, expansion and re-issue of the History of Communications book published for our 50th anniversary in 2002, and the production of a 25-minute recollections video in which many former Presidents of IEEE ComSoc recounted their experiences in the communications field and in IEEE ComSoc.

Stefano: What is the current composition of the Communications History Committee?

Doug: Due to the wide range of activities envisioned for this committee, the committee has about a dozen members with the following roster:

Committee Roster

Chair | Douglas Zuckerman (2022-2024)

Voting Members

2022-2024 | Douglas Zuckerman

2022-2023 | Stephen Weinstein

2022 | Scott Atkinson, Kit August, Celia Desmond, Tarek El-Bawab, Rose Hu, Curtis Siller, Martha Steenstrup, Tim Weil, Sarah Kate Wilson

Staff | Cynthia Sikora

This team has former ComSoc presidents, past Communications Magazine EiC's, a past History Committee chair, several Life Members, and founders of some of the earliest ComSoc flagship conferences as well as organizers of more recent ones.

Stefano: Certainly, your Committee includes very well known volunteers of ComSoc, with a long record of service in our Society. What initiatives are you planning for this year?

Doug: Earlier this year, the History Committee came up with the following initiatives for 2022:

- **Communications History Book** — Add events since 60th anniversary edition (also feeds into Interactive Communications History).
- **Interactive Communications History** — Contribute to this project which has been funded by ComSoc's Board of Governors.
- **IEEE Milestones** — Identify and guide proposals for new communications milestones.
- **Conference History** — Start with GLOBECOM/ICC history — including interviews.
- **Presence at IEEE GLOBECOM 2022** — Organize and moderate a panel (currently planned to be a "Panel of Presidents," and will memorialize several leaders who have passed during the year). Have exhibit hall presence.
- **Presence in IEEE Communications Magazine** — Do column, reprints, old ComMag synopses, Global Communications News (GCN) articles.
- **Update Web Presence** — Participate in ComSoc-wide website update activity relevant to history activities.
- **Virtual Museum** — Provide an AR/VR museum experience.
- **Diversity, Equity and Inclusion** — Recognize "Women in Communications History."

In addition, there are two other important activities:

- **ComSoc Platinum Jubilee Celebration** — Work with the Board of Governors and ComSoc staff in preparing for the Society's 70th Anniversary Platinum Jubilee celebration.
- **Memorializations** — Write obituaries for ComSoc's "In Memory" website and where appropriate author Society News articles in Communications Magazine for recently deceased colleagues. This year, we have memorialized Bob Lucky and Des Taylor (May they rest in peace.).

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Stefano: Would you please explain the meaning of the three items you mentioned in the title of this interview? Capturing, Curating and Making Easily Available?

Doug: Capturing, curating and making easily available our history is a daunting, almost boundless, challenge. IEEE itself has an IEEE History Committee with full time staff and has been supporting some of our activities, including hosting an important communications history site: https://en.wikipedia.org/wiki/IEEE_Communications_Society. Discussions are ongoing on how our Society's and IEEE's history committees may continue collaborating on mutually beneficial activities.

An area where we can especially use help is in generating history articles for Communications Magazine. As ComSoc's History Committee chair, I also do a history column in that magazine. I have solicited a few articles that are still in preparation but would like to see a more regular presence. One idea has been to have monthly one-page synopses of the tables of contents from "this month, 25 and 50 years ago." Also, the ComMag EiC has solicited best papers for reprint (with possible historic updates) from issues during their term as EiC. Going forward, I would expect to see more history content appearing in ComMag.

Stefano: Are you working also with some Chapters?

Doug: Since this is an article in the Global Communications Newsletter, I would be remiss if I didn't mention that history also has a geographic perspective. Many IEEE sections and regions have history committees, and these typically include content of relevance to communications. An example that comes to mind is that of the NJ Coast Section. This is the section that had been the host to important fundamental research and development entities in the communications field, e.g., Bell Labs and Fort Monmouth. AT&T also hosts a museum within this section. This example of a section history is at https://ethw.org/IEEE_New_Jersey_Coast_Section_History. Note, its historian is also an active member of the ComSoc History Committee.

Stefano: Besides posting a column on the Communications Magazine, are you also planning to organize some event at ComSoc conferences?

Doug: As already mentioned, we are organizing a "Panel of Presidents" for GLOBECOM 2-22 in Rio de Janeiro this December, as well as being part of the ComSoc exhibition booth. The History Committee is also participating with ComSoc's Board of Governors in identifying other anniversary activities as well.

Above, the Conference History initiative mentioned starting with GLOBECOM and ICC (flagships) capturing their history. This is well underway for our two flagship events. I would like to encourage our important portfolio conferences to also capture their history. Memories fade, so now, at the Society's 70th anniversary, is the time to do it.

For example, how many people will remember when the first

NOMS took place, where it was, who was on the organizing committee, and what topics were important at the time? I was able to find the call for participation that appeared in the November 1987 issue of *IEEE Communications Magazine*, when Fred Andrews was ComSoc President (and a strong supporter of NOMS).

The first NOMS took place in February 1988 in New Orleans, was heavily supported by AT&T Bell Labs (especially Eric Sumner) and BellCore (especially Fred Andrews), had the theme, "Productivity Through Operations," was standing room only (registrations were screened and many were turned away), and generated an unmentionably huge surplus. Also, its conference record was "visuals plus accompanying text" (done by "cut and paste" on paper during this pre-PPT era). The attendees were almost entirely from industry. Bruce Kiebert was General Chair, Ed Glenner was Vice General Chair, and Ken Lutz and I were the Technical Program Committee Chairs. From the call, it is interesting to note the variety of topics that were important to the network operations and management community — and industry — at that time.

Stefano: I am sure you have a number of nice memories to share! Please, choose one from your early career in the communication industry and tell us. Young readers will be interested to hear.

Doug: I could also share early memories from my professional career at Bell Labs, starting at Holmdel on the WT4 Millimeter Waveguide Transmission System in June 1969. My first boss told stories of his days on the Telstar project, which was a "spare no money" effort in response to the launch of Sputnik. The WT4 system had promise until long distance fiber proved practical — and then many of us moved onto satellites and undersea cable.

On a more personal level, which will give away my generation, I grew up with vacuum tubes, rotary telephones (on a party line), and our first TV (black and white, with a mechanical tuner, only one for the family). During my undergraduate years at Columbia University (USA), we used a book by Millman and Halkias and taught at the cusp of moving from vacuum tubes to transistors and integrated circuits. I also recall a one-semester class taught by Omar Wing on the Fortran IV programming language - used with punch cards and a huge IBM 360 computer center ("printouts" were overnight at the "economy" rate). Prof. Wing was responsible for my joining IEEE as a student member. In his introductory circuits class, he handed out application forms and said IEEE was good to join. I joined.

This reminds me of an "historic" telecom concept, "The Network is the Database." Analogously, one might say, "The Members are the History." All of us are creating history and storing it in our personal memories (some of which I just shared with you). The challenge is in capturing, curating and making that history easily available. The ComSoc History Committee stands ready to help!

CHAPTER REPORT

News from the Denver ComSoc Chapter

by Tim Weil, ICC 2024 General Chair, and Mark Milliman, Denver ComSoc Chapter Vice-Chair, USA

The Denver COMSoc chapter, like other chapters, is transitioning back to in-person meetings while incorporating some of the positive aspects of the last couple of years. We are facilitating more hybrid meetings especially technical talks to accommodate the hectic schedules of our members. Our section is geographically spread out over a geographical territory that can take two hours to reach from end-to-end. Hybrid meetings provide greater value to our members when the location is far away from them.

Another thing we are doing is co-hosting more events with other societies and geographical chapters. Co-hosting allows us to offer a greater quantity and diversity of technical talks than what we would do alone. Several of our events are applicable



University of Denver COMSoc Meeting (students and ICC 2024 Committee)
Photo credit - David Gao, Ritchie School of Engineering, University of Denver

to other societies as well. Finally, we are reinvigorating our student chapters. We have three major universities in our section

that are full of opportunities to connect students with our many local companies.

Our June chapter meeting was sponsored by the University of Denver (DU) as a way to create that opportunity. It was well-attended by DU faculty and students, COMSOC chapter members and the planning committee for the ICC 2024 conference. Part of the program was dedicated to review the recent IEEE International Conference on Communications (ICC 2022 — Seoul, KR) presented by Tim Weil, Denver Chapter officer and chair of the ICC 2024 (Denver) conference.

As General Chair for the ICC 2024 (Denver) program, my recent trip to ICC 2022 seemed like a great opportunity to build interest in our program and recruit new volunteers to our committee. The talk highlighted this year's conference theme "Intelligent Connectivity for Smart World" presenting advances in mobile wireless networks 5G/6G networks, AI/ML research and the future state of high-speed networks.

The meeting was intended to give local chapter members that could not attend or yet to volunteer for planning a better understanding of how the ICC conference is planned, and how they can contribute to our 2024 program. Steve Jia, CableLabs, provided a technical presentation on Radio Access Networks for 5G.

The Denver COMSOC chapter has several social and technical events planned for the rest of the year including company tours, DLT talks, and member presentations as well as a few social events with students and other local society chapters.

The IEEE Denver Section (and COMSOC Chapter) is hosting



Tim Weil at ICC 2022 (Seoul, KR) - <https://stories-and-songs.us/node/162>

the 2024 ICC conference in Denver with the theme promoting "Scaling the Peaks of Global Communication Networks." Colorado was home for the early COMSOC flagship conferences including GLOBECOM (1965) and ICC (1993) that were hosted in Boulder and Denver. Our local organizing committee continues to welcome volunteers and local telecommunication industries and professionals to join our program. For more information contact us at — Denver_Chapter@comsoc.org.

CHAPTER REPORT

Talks on Day of Light at Thailand Chapter Twenty Five Years Thai Hologram, Solar Farm, and Updated Misleading LiFi

by Keattisak Sripimanwat, IEEE ComSoc Thailand Chapter Chair

As previous years, Thai ComSoc chapter joined the international day of light (IDL) event as a national contact node. For IDL2021, its theme was set with "Society, Energy, and Lighting" (www.quantum-thai.org/idl-2021-thailand). The opening speech was given online on May 16 by Boonrucksar Soonthornthum, an advisor and former director of the national astronomical research institute of Thailand (NARIT). Recent NARIT projects was also introduced.

Following by a full story in order to celebrate the 25th anniversary for the golden jubilee hologram (1996), the documentary behind those beautiful 3D pictures was released by Thai ComSoc chapter. That fascinated collection is not only with historical content, but also includes different R&D perspective with high hidden cost. It is eventually one of the national milestones based on light (IEEE Foundation's granted project 2019). This hologram story is quite a good lesson learned for the future national policy on science and technology development.

Next, the most popular title on "Solar cell & Solar Farm 2021," was given by Dr.Kobsak Sriprapha, a NSTDA's researcher. General knowledge was delivered successfully to non technical background audiences with up-to-date progress of various national projects.

Furthermore, another highlight topic was followed; "Light Fidelity (LiFi) case study: an immunity to pseudoscience." Since LiFi is claimed as a counterpart of WiFi that using LED light bulb to be

a new faster hotspot connecting to mobile devices ! However, LiFi as quite a serious hype, has been promoting irresponsibly for over a decade around the world. Thus, revealing its behind stories is that the way to protect our students, members, and people from this kind of crazed engineering. Summary of previous articles (bit.ly/31z0GmT & bit.ly/34Ea36L) with updated misleading stories including the rhetoric & excuses from recent few years, were then presented by the chapter chair. Related science communications through ComSoc's social medias was done throughout the year in order to raising public awareness.

Finally, Thai ComSoc chapter would like to thank all IDL2021's supporters; 1) IEEE photonics society (educational seed funding) 2) institute for the promotion of teaching science and technology (IPST) 3) electricity generating authority of Thailand (EGAT) and 4) metropolitan electricity authority (MEA), for their kindness to co-enlighten people on technology development with fraud prevention.



Poster and video thumbnail of an IDL2021 talk — 25th anniversary of the golden jubilee hologram (1996–2021)

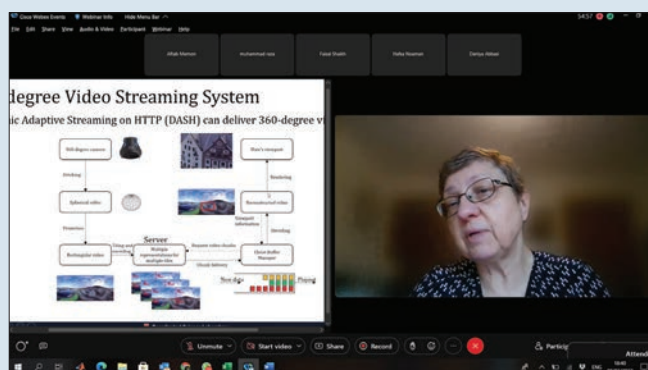
IEEE ComSoc Karachi Chapter Distinguished Lecture Series on “Navigation Graphs for 360 Degrees Tile Based Video Streaming Systems”

by Umair Ahmed Korai, MUET, IEEE Communication Society Karachi Section Chapter Vice Chair, Pakistan, Bhawani Shankar Chowdhry, MUET, IEEE Karachi Section Chair, Aftab Ahmed Memon, MUET, Pakistan

IEEE Communication Society (ComSoc) Karachi Chapter in collaboration with IEEE ComSoc Mehran University of Engineering and Technology (MUET) Student Branch Chapter, IEEE Karachi Section, and QS World Merit organized a second talk of the distinguish lecture series — IEEE ComSoc Karachi chapter on “Navigation Graphs for 360 Degrees Tile Based Video Streaming Systems”. The guest speaker of this talk was Prof. Klara Nahrstedt, University of Illinois at Urbana Champaign, United States of America on March 08, 2022. The talk was organized virtually Cisco WebEx tool.

Distinguish Lecture Series — IEEE ComSoc Karachi Chapter is an initiative of IEEE ComSoc Karachi Chapter. The aim of this series is to promote the latest technological information among the students, young professionals, and professionals. The total registered participants in this online talk were 120 out of which 36 were IEEE members and 84 were non-IEEE members.

The online talk was formally started with recitation of the Holy Quran. Afterwards, Dr. Umair Ahmed Korai, Assistant Professor at Dept. of Telecommunication Engineering, MUET and Vice Chair IEEE ComSoc Karachi Chapter, welcomed the worthy Guest Speaker, Chief Guest, Guest of Honor, the Coordinators, the Organizers, and the Participants. The worthy Chair IEEE Karachi Section, Prof. Dr. Bhawani Shankar Chowdhry, attended the workshop as the Chief Guest, delivered his speech, and appreciated the Speaker for taking their time from their very busy schedule. He also appreciated the efforts of Prof. Klara towards the research and activities related to IEEE ComSoc. The head of the Telecommunication department, MUET, Prof. Dr. Aftab Ahmed Memon, also attended this online talk as a guest of honor. The former head of the Telecommunication department MUET and currently working as a Professor, Prof. Dr. Faisal Karim Shaikh also attended this talk.



Talk delivered by Prof. Klara Nahrstedt, University of Illinois at Urbana Champaign, United States of America.



Welcome address by Dr. Umair Ahmed Korai.

The online talk last for about 90 minutes and there were quite good questions from the participants. Prof. Klara gave an excellent presentation about the Navigation Graphs for 360 Degrees Tile Based Video Streaming Systems. Team IEEE ComSoc Karachi Chapter received huge appreciation from Chair IEEE Karachi section, Prof. Dr. Bhawani Shankar and received excellent responses from participants. The talk was amazing and helpful for the students.

In last, the head of the Telecommunication department, MUET, Prof. Dr. Aftab Ahmed Memon gave the concluding remarks and vote of thanks to the chief guest, guest speaker, event organizers, collaborators, volunteers, and participants.

GCN GLOBAL COMMUNICATIONS NEWSLETTER

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www.comsoc.org/gcn
ISSN 2374-1082