

## Report on the Distinguished Lecture Tours (DLTs)

**Reported by IEEE Asia-Pacific Limited – Fanny Su & Ewell Tan (as at 18 November 2014)**

There are a total of 14 DLTs approved by IEEE ComSoc for Asia-Pacific region this year. We continue with our report on the ComSoc DLTs from the last AP newsletter.

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### 2014 AP DLT #5: 5 – 11 May 2014

Lecturer: Tarik Taleb

Hosting Chapter	2014 Chapter Chairs
Beijing ComSoc Chapter	Xiaofeng Tao
Shanghai ComSoc Chapter	Xinwan Li



Dr. Tarik Taleb delivered the technical talk on “Mobile Networks as a Cloud Service” at the following locations:-

- 1. Beijing – 6-7 May 2014**  
Lecture 1 - Venue: Chinese Academy of Science  
Lecture 2 – Venue: Beijing University of Posts and Telecommunications (BUPT)
- 2. Shanghai – 8 May 2014**  
Lecture 3 - Venue: Shanghai Jiao Tong University

### **Summary Report from Dr. Tariq Taleb**

*On my first DLT tour, I visited both Beijing and Shanghai where I delivered industry-focused talks on how to build mobile networks as a cloud service, referring to emerging technologies such as the network function virtualization and mobile cloud computing. The talks were delivered at the Chinese Academy of Science, Beijing University of Post and Telecommunications and the Shanghai Jiao Tong University. They were very well attended. The audience, principally consisting of post-grad students and post-doc researchers, was very active asking plenty of questions and showed great interest in the topics of the talks. Many students also followed up asking questions offline by email. The tour was also very successful in terms of building relationships with the faculty staff of the three visited institutes, not to mention promoting IEEE ComSoc and its activities within the Chinese community of students, the largest in the*

World. In my humble opinion, the given talks were also beneficial for young graduate students to help them define research topics of potential interest to industry.

Finally, I would like to express my sincere gratitude to the organizers of the Beijing ComSoc and Shanghai Comsoc chapters for making of my stay in China a memorable one. I really enjoyed every conversation I had with each of them and am looking forward opportunities to meet them in the future and collaborate with them on timely research topics.



*Lin Zhang, Tarik Taleb, Dieter Hogrefe, Xiaoming Fu, and N. N. at BUPT campus.*

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**2014 AP DLT #6: 25 – 29 August 2014**

**Lecturer: Rath Vannithamby**

<b>Hosting Chapter</b>	<b>2014 Chapter Chairs</b>
Indonesia ComSoc Chapter	Satriyo Dharmanto



Dr. Rath Vannithamby presented his technical presentation at the following venues:

**1. Jakarta - 26 August 2014 (Tuesday)**

Topic: 5G Evolution and Candidate Technologies

Venue: Universitas Mreucu Buana, Jakarta

**2. Bandung, West Java – 27 August 2014 (Wednesday)**

Topic: 5G Evolution and Candidate Technologies

Venue: Telkom University, Bandung

**3. Bali – 28-29 August 2014 (Thursday)**

Topic 1: M2M Communications for Internet of Things

Topic 2: 5G Evolution and Candidate Technologies

Venue: IEEE APWiMoB, Grand Inna Kuta, Bali

**Summary Report from Dr. Rath Vannithamby**

*Sponsored by the IEEE ComSoc and hosted by the IEEE ComSoc Indonesia Chapter, I visited Universitas Mreca Buana/Jakarta, Telkom University/Bandung and Bali to give 3 Distinguished Lectures and a Keynote at IEEE Asia Pacific Conference on Wireless and Mobile (APWiMoB) and International Conference on Industry Automation Information and Communication Technology (IAICT).*

*My Lectures were on “5G Evolution and Candidate Technologies” and Keynote was on “Machine to Machine Communications for Internet of Things”.*

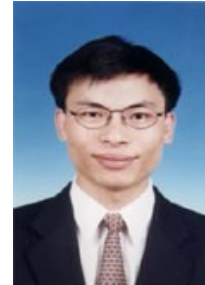
*I was very encouraged with the enthusiasm in learning the next generation technologies during all three lectures. I am very thankful for the hosting institutions for their hospitality. Special thanks to Ms. Ewell from IEEE Asia-Pacific Limited and IEEE ComSoc for making this possible.*

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**2014 AP DLT #7: 4 – 11 May 2014**

**Lecturer: Xiaoming Fu**

Hosting Chapter	2014 Chapter Chairs
Shanghai ComSoc Chapter	Xinwan Li
Beijing ComSoc Chapter	Xiaofeng Tao



Dr. Xiaoming Fu conducted his technical presentation on “Scaling Micro-blogging Services with Divergent Traffic Demands” at the following venues:

**1. Shanghai – 5 May 2014 (Monday)**

Venue: Shanghai Jiao Tong University

**2. Beijing – 7 May 2014 (Wednesday)**

Venue: Beijing University of Posts and Telecommunications (BUPT)

**3. Beijing – 8 May 2014 (Thursday)**

Venue: Chinese Academy of Science

## **Summary Report from Dr. Xiaoming Fu**

*Having the opportunities in delivering several lectures on data networking and Internet computing in Asia and Pacific, Europe, North America and South America, I have been honored appointed as an IEEE Communications Society Distinguished Lecturer starting January 2014.*

*China is my home country where I grew up and got educated. In the recent years, I have participated in several EU-sponsored or bilateral projects involving some Chinese partners, which brought me a lot of fun and fresh experiences with different Chinese colleagues. Nevertheless, my personal feeling is that they are more project-driven, unlike a global organization such as IEEE ComSoc which could bring a different value for the whole research community.*

*Upon the invitations of IEEE ComSoc Shanghai Chapter and Beijing Chapter, I had the opportunity to make my first DLT to China. IEEE ComSoc Asia-Pacific Project / Admin Executive Ewell Tan was extremely efficient and professional in communicating with local chapters and sectors on my DLT schedule. The initial thought was to deliver lectures in Nanjing, Shanghai, Wuhan and Beijing, but due to time conflicts I could not visit Wuhan, and some of my lectures (“Fine-Grained Multi-Resource Scheduling in Cloud Datacenters” at Nanjing University in Nanjing and Fudan University in Shanghai, as well as “Content Distribution: from Client/Server to Content-Oriented Publish/Subscribe System” at Tsinghua University in Beijing) were delivered outside the DLT program due to synchronization issues with the local chapters. Although these lectures were not directly under the IEEE DLT flag, Ewell encouraged me to deliver them as planned, which actually turned out to be well perceived by colleagues and students in these institutions.*

*After my Nanjing trip, I arrived in Shanghai on 4<sup>th</sup> May and gave a lecture at Fudan University on 5<sup>th</sup> May morning. After lunch, I visited Shanghai Jiao Tong University (SJTU), one of the top engineering universities in China, for the first time, and gave my first DLT lecture on the design, implementation and evaluation of scalable microblogging systems. There were over 30 attendees, some faculty members, and many graduate and undergraduate students from SEIEE, including all students from a seminar course usually planed for that slot. The audience showed a great interest in the topic, and I enjoyed the interactions during the talk and in the Q&A period after the presentation. In particular, I received emails from some students after the seminar. Some of them wanted to study in Göttingen and work on related topics. My hosts Prof. Xinwan Li (IEEE ComSoc Shanghai Chapter Chair, and Vice Dean of SJTU-Michigan University Joint Institute), Prof. Xinbing Wang (IEEE ComSoc Shanghai Chapter Chair), and Dr. Xiaohua Tian were very thoughtful, and warmly invited to visit their labs in SEIEE as well as the Michigan University-SJTU Joint Institute. From my personal feeling, SJTU is certainly China’s most modern university owing to their broad visions, maximal elimination of bureaucracy and well adoption of western educational culture. SJTU has also its open mind to attract world-class experts and scientists to work there or collaborate with them. It’s amazing that many faculty members hold U.S., Canadian, Japanese or European PhD degrees, and they are implementing the tenure-track system with competitive salary and expectations. SJTU’s Minhang campus is huge, beautiful, and elegant; I had not the time to visit it*

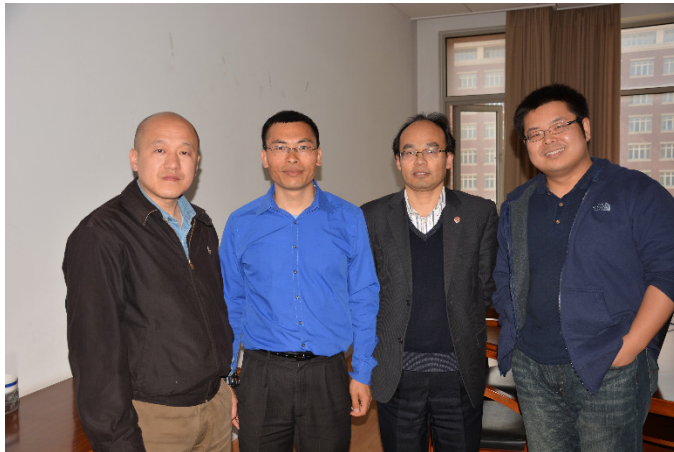
*except the office buildings of Prof. Li, Prof. Wang and an in-campus coffee bar, but I would definitely see it around in a next trip.*

*My next DLT lecture took place in Beijing University of Posts and Telecommunications (BUPT) on 7<sup>th</sup> May 2014. In the classroom I was delighted to meet another DLT lecturer Dr. Tarik Taleb, a colleague from NEC Europe Networking Lab, Heidelberg, Germany, who gave a lecture right before mine. We knew each other since quite some time ago and both are located in Germany. His lecture focused on the cloud computing architecture perspectives, while mine more focused on the Internet service and systems point of view. The audience was roughly 40, mostly faculty members and graduate students from Communications Engineering, from which I saw there was a keen interest in learning about the social networks domain and other emerging Internet services. After the lecture I had also the pleasure to meet our current EU project partner (Prof. Lin Zhang and Prof. Jun Guo) and IEEE ComSoc Beijing Chapter Chair Prof. Xiaofeng Tao, and discussed some issues related to crowdsourcing and mobile cloud computing.*

*In summary, I had a pleasant and fruitful first DLT in China. I enjoyed it very much - thanks the generous support of IEEE ComSoc and also the hospitality of local chapters.*



**Lecture at Shanghai Jiao Tong University**



**Xinbing Wang, Xiaoming Fu, Xinwan Li,  
and Xiaohua Tian at SJTU  
(from left to right)**

## **Summary Report from Beijing ComSoc Chapter**

*IEEE Communications Society (ComSoc), Beijing Chapter arranged lectures on 7<sup>th</sup> and 8<sup>th</sup> May, 2013 at Beijing University of Posts and Telecommunication (BUPT) and Chinese Academy of Science (CAS). Dr. Xiaoming Fu was invited to give the 50 minutes lectures on 'Scaling Microblogging Services with Divergent Traffic Demands' at both venues. Prof. Xiaofeng Tao, Chair of ComSoc Beijing Chapter, hosted the seminar at BUPT and Dr. Xue Han hosted it at CAS. There were totally about 80 attendees at both venues, including university students, academic researchers and public participants from ICT related Industries.*

*The related information about the lectures, including abstract of the talk and a brief introduction of Dr. Fu was E-mailed to IEEE ComSoc Beijing Chapter Members by Prof. Tao. Also, the lecture announcements were notified on the universities website announcement boards by the school academic committees.*

*The lecture was started from the discussion of growing tendencies of social media sites and the amount of traffic they generate. Today's microblogging services such as Twitter have long outgrown their initial designs as SMS-based social networks. Instead, a massive and steadily-growing user population of more than 100 million is using Twitter for everything from capturing the mood of the country to detecting earthquakes and Internet service failures. It is unsurprising that the traditional centralized client-server architecture has not scaled with user demand, leading to server overload and significant loss of availability. Social media sites such as Twitter performance and availability is not satisfying, even at normal time. Some short term solutions such as per-user request and connection limits, network usage monitoring and doubling the capacity of internal networks fix few strings and the problems are still there.*

*A novel system architecture, Cuckoo was introduced, which is tailored for microblogging to address scalability issues. This architecture relieve main server burden and achieve scalable content delivery by decoupling the dual functionality components. Cuckoo offloads processing and bandwidth costs away from a small centralized server base while ensuring reliable message delivery. A detailed measurement is done over Twitter and is found brings significant benefits such as bandwidth savings, CPU and memory reduction and good performance of content delivery/dissemination.*

*Dr. Fu took 50 minutes for his lectures at BUPT and CAS. Participants were very interested in the topic and contents. Notes were taken and questions were asked during the lecture by many participants. Question-answer continued after the lecture for additional 20 minutes. The questions were covering both the basic and professional aspects of the topic. Due to the shortage of Q/A time, several participants had further exchanges with Dr. Fu after the session ended. After the lecture, Dr. Fu had a further talk with various professors in BUPT/CAS and visited the related labs.*

*IEEE ComSoc Beijing Chapter is very pleased to host Dr. Xiaoming Fu and believe that his lecture brought many significant ideas in the minds of young researchers and at the same time cleared many doubtful minds.*

We also hope that Dr. Fu also had a pleasant experience on his visit to Beijing.

**Written by Waheed ur Rehman**  
**Secretary, IEEE ComSoc Beijing Chapter**

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**2014 AP DLT #8: 14- 18 July 2014**

**Lecturer: Fabrizio Granelli**

Hosting Chapter	2014 Chapter Chairs
Kansai ComSoc Chapter	Hiroyuki Kumazawa
Japan Council ComSoc Chapter	Kazuo Hagimoto
Sendai ComSoc Chapter	Nei Kato



Dr. Fabrizio Granelli delivered his technical presentations at the following venues:

**1. Kansai – 15 July 2014 (Tuesday)**

*Lecture Topic:*

Networking and the Smart Grid: the relevance of communications in the future of power grid

*Venue:* Osaka Institute of Technology, Umekita Knowledge Center

**2. Tokyo – 16 July 2014 (Wednesday)**

*Lecture Topic:*

Green wireless networking: energy efficiency in wireless networks and;

Cognitive and adaptive networking: self-management at the service of network evolution

*Venue:* The Kikai Shinko Kaikan Building

**3. Sendai – 18 July 2014 (Friday)**

*Lecture Topic:* Green wireless networking: energy efficiency in wireless networks

*Venue:* Tohoku University

***Summary Report from Japan Council ComSoc Chapter***

*The lecture of Dr. Fabrizio Granelli, Associate Professor of Trento University in Italy, was held on Wednesday, 16 July 2014 from 3:00 pm to 5:00 pm at the Kikai-Shinkou Kaikan Building hosted by IEEE Communications Society Japan Chapter. This lecture was one of the lecture series in three locations of Japan: Kansai, Tokyo, and Sendai.*

*There were 45 participants in this lecture. 26 participants (58%) were IEEE members while 19 participants (42%) were non-members. 21 out of 26 IEEE members were Communications Society members. From the viewpoint of participant's affiliation, 38 participants (84%) were from industries such as laboratories in the communication related companies and 7 participants (16%) were from academia such as universities.*



*First, Dr Shinichi Nomoto, Vice-Chair of IEEE Communications Society Japan Chapter, addressed opening remarks. After the short introduction of Dr. Granelli’s biography, the lecture on two topics “Cognitive and adaptive networking: self-management at the service of network evolution” and “Green wireless networking: energy efficiency in wireless networks” were given by Dr. Granelli for 2 hours. End of each topic, we had a discussion time and 3 or 4 questions were raised for each topic from audiences. Each question was not superficial but insightful, so extensive and fruitful discussions were made between the lecturer and audiences. After the finish of this seminar, some enthusiastic participants directly contacted Dr. Granelli for more detailed discussion and further information. We heard many participants were satisfied Dr. Granelli’s exciting lecture. So the lecture was successfully concluded.*

*Regarding lecture topic, we were proposed four potential topics with short description during the arrangement of this lecture. We contacted some chapter members to ask which topic was attractive for our chapter members. We heard the above two topics were interesting, so we asked Dr. Granelli to talk two topics in the lecture. This was very useful procedure to attract the chapter member’s attention and interest to this lecture.*

*We thank Dr. Fabrizio Granelli for his great lecture and we also appreciate various supports from the related organizations including IEEE Communications Society, and IEEE Asia-Pacific / Communications Society Office. We are looking forward to have similar opportunities in the near future.*

**Written by Takuya Ohara**  
**Japan Council ComSoc Chapter**

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**2014 AP DLT #9: 27 May – 12 July 2014**

**Lecturer: Pradeep Kumar Ray**

Hosting Chapter	2014 Chapter Chairs
Tainan ComSoc Chapter	Chih-Peng Li
Taipei ComSoc Chapter	Guu-Chang Yang
Shanghai ComSoc Chapter	Xinwan Li



*\* This DLT was cancelled as Prof. Pradeep Kumar Ray was unwell to travel.*

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## 2014 AP DLT #10: 8 – 18 June 2014

### Lecturer: Ying-Dar Lin

Hosting Organizer	Contact Person
University of Sydney	Albert Zomaya & Javid Taheri
Deakin University	Shui Yu
Swinburne University	Grenville Armitage
Hosting Chapter	2014 Chapter Chairs
New South Wales ComSoc Chapter	Jinhong Yuan
Victorian ComSoc Chapter	Paul G. Fitzpatrick



Prof. Ying-Dar Lin delivered a technical presentation of “Software Defined Networking: Why, When, Where and How” at the following venues:-

**1. 11 June 2014 (Wednesday)**

Lecture 1 - Venue: University of Sydney

**2. 16 June 2014 (Monday)**

Lecture 2 - Venue: School of Information Technology, Deakin University

**3. 17 June 2014 (Tuesday)**

Lecture 3 - Venue: Swinburne University of Technology

### ***Summary Report from Deakin University***

*On June 16, 2014, Professor Ying-Dar Lin presented a distinguished lecture at Deakin University, titled “Software Defined Networking: Why, When, Where, and How.” There are around 50 audience attended the talk, which includes the research staff and students from Deakin University, RMIT University, a few researchers from China and Japan as well. About half of the audiences are IEEE members.*

*The talk was extremely welcomed by the audience, and many questions were asked and answered. The talk clearly defined SDN as the second wave of cloud computing, which is significantly helpful for us to understand SDN, a new uncharted land. All research staff and students highly praised the talk.*

*I truly believe the distinguished lecture is a great promotion for member recruitment and retention.*

*The only improvement that I have in mind is that we need more such kind of distinguished lectures at Melbourne, Australia. As a result, we would like to host more DL in the future.*

***Written by Shi Yu***

***Senior Lecturer, School of Information Technology***

***Deakin University***



*Group Picture after the lecture at Deakin University*

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**2014 AP DLT #11: 9 – 15 November 2014**

**Lecturer: Ekram Hossain**



Hosting Chapter	2014 Chapter Chairs
New Zealand Central ComSoc Chapter	Terence Betlehem
New Zealand North & South ComSoc Chapter	Nurul Sarkar

Prof. Ekram Hossain will conduct a technical presentation on “Evolution towards 5G Cellular Networks: Radio Resource and Interference Management Issues” at the following locations:

- 1. Christchurch – 10 November 2014 (Monday)**  
Lecture 1: Venue – University of Canterbury
- 2. Wellington – 11 November 2014 (Tuesday)**  
Lecture 2: Venue – Victoria University
- 3. Auckland – 13 & 14 November 2014 (Thursday & Friday)**  
Lecture 3: Venue: To be confirmed

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**2014 AP DLT #12: 19 – 26 November 2014**

**Lecturer: Rath Vannithamby**



Hosting Chapter	2014 Chapter Chairs
Malaysia ComSoc Chapter	Nordin B. Ramli
Singapore ComSoc Chapter	Ying-Chang Liang
Thailand ComSoc Chapter	Kamol Kaemarungsi

Dr. Rath Vannithamby will be presenting “5G Evolution and Candidate Technologies” and “M2M Communications for Internet of Things” at the following locations:-

1. **Kuala Lumpur – 20 November 2014 (Thursday)**
2. **Thailand – 22 November 2014 (Saturday)**
3. **Singapore – 24 November 2014 (Monday)**
4. **Langkawi , Malaysia – 25 November 2014 (Tuesday)**

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**2014 AP DLT #13: 3 – 6 September 2014**

**Lecturer: Sumit Roy**



Hosting Chapter	2014 Chapter Chairs
Hyderabad ComSoc Chapter	Mohammed Zafar Ali Khan

Dr. Sumit Roy has presented the lecture topic of “White Space Networking” at the following venues in Hyderabad:

1. **4 September 2014 (Thursday)**  
Lecture 1: International Institute of Information Technology (IIIT, Hyderabad)
2. **5 September 2014 (Friday)**  
Lecture 2: Indian Institute of Technology (IIT, Hyderabad)
3. **5 September 2014 (Friday)**  
Lecture 3: Birla Institute of Technology and Science (BITS, Hyderabad)

## **Summary Report from Hyderabad ComSoc Chapter**

*Prof. Sumit Roy visited Hyderabad and delivered 3 distinguished lectures hosted by the IEEE COMSOC /SP Hyderabad Joint Chapter.*

*The first lecture was organized by IIIT Hyderabad and COMSOC/SP Hyderabad Joint Chapter at the IIIT Hyderabad, Gachibowli campus on 4 September at 10:30 am. The lecture topic was "White Space Networking: Integrated Sensing and Database Architecture". The lecture was attended by 22 guests including 7 IEEE members.*

*Second lecture was organized by the IEEE Student Branch of BITS PILANI Hyderabad Campus and COMSOC/SP Hyderabad Joint Chapter at the BITS Pilani, Hyderabad campus on 5 September at 5 pm. The lecture was attended by 64 guests including 22 IEEE members.*

*Prof. SUMIT ROY (Dept. of Electrical Engineering, University of Washington, Seattle) delivered the lectures in a splendid fashion. He took his time in getting acquainted with the audience (which largely consisted of 3<sup>rd</sup> and 4<sup>th</sup> year students, along with a handful of M.E students and PhD Research Scholars). Impressed by the number of IEEE members presented at the lecture, Prof. Sumit Roy went on to say that being a part of the IEEE student chapter is of great value, the reason being that it not only exposes students to latest developments in the technological sector but also helps them during placements and research. He mentioned many digital journals which IEEE had published over the years and also various conferences conducted by the IEEE Communications Society such as the IEEE GLOBECOM, IEEE INFOCOM, IEEE CCNC, IEEE PIMRC and IEEE WCNC.*

*Prof. Sumit Roy then started his lecture with a question: "What are White Spaces?" upon receiving an answer from an eager student, he went on to describe in depth his topic. He explained how unused or "free" regions in the radio spectrum (called White Spaces) could be harnessed to our advantage in order to solve the global crisis of inadequacy of unlicensed service bands. The difference between supply and demand has become huge and more offload is required in terms of unlicensed service. This could be solved with the use of white spaces.*

*He talked about the advent of 4G in the US due to increasing network traffic and went on to highlight the problem of SPECTRUM CRUNCH, which was caused due to the lack of sufficient network capacity at crucial times.*

*Overall, the presentation was highly enlightening and it gave the students a new area to venture into.*

*The third lecture was organized by IIT Hyderabad and COMSOC/SP Hyderabad Joint Chapter at the IIT Hyderabad, ODF campus on 5 September at 10 pm followed by discussions with faculty and students of Dept of EE, IIT Hyderabad. Prof. Sumit Roy introduced the interference issues in the Distributed Small Cells and proposed time-frequency ALOHA as a solution. A video link of the lecture is [available](#)*

*The lecture was attended by 49 guests including 9 IEEE members and resulted in discussions on CR and communications in general.*

IIT Hyderabad, BITS PILANI, Hyderabad, IIT Hyderabad and IEEE COMSOC/SP Hyderabad chapter would like to thank Prof. Roy for the exciting lectures and the insightful discussions.



**Group Picture taken at Birla Institute of Technology and Science, Hyderabad**

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**2014 AP DLT #14: 10 - 15 November 2014**

**Lecturer: Jaafar Elmirghani**

Hosting Chapter	2014 Section / Chapter Chairs
New Zealand Central Section	Mansoor Shafi
New Zealand North Section	Morteza Biglari-Abhari
New Zealand South Section	Sharmalee T Spalding
New Zealand North & South ComSoc Chapter	Nurul Sarkar



Prof. Jaafar Elmirghani will be presenting the topic of “Greening Core, Data Centre and Content Distribution Networks” at the following locations:

- 1. Wellington: 11 November 2014 (Tuesday)**
- 2. Auckland: 13 November 2014 (Thursday)**
- 3. Dunedin: 14 November 2014 (Friday)**

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**In Summary:**

The ComSoc activities in Asia Pacific region this year remain active and vibrant with a record total of 14 DLTs approved by IEEE ComSoc. Geographically, we have a broad coverage of approved DLTs in Asia Pacific this year, which include countries such as New Zealand, Australia, Japan, Taiwan, China, India, Malaysia, Thailand, Indonesia and Singapore.

Technical topics such as Mobile Networking and 5G Evolution are of much interest to our members and audiences in Asia Pacific region this year. We are very pleased to have many hosting organizers who expressed their interest in hosting the DLT programs. We strongly believe that members and audiences either from academia or industrial background have gained valuable knowledge and insight through the DLTs.

Nonetheless, the success of ComSoc DLTs in our region would not be accomplished without the dedication and effort from our distinguished lecturers. We greatly appreciate all the distinguished lecturers who have spent their precious time and effort to travel to our region, and to share their expertise and experience with us.

We are very much looking forward to organizing more exciting ComSoc DLTs for our members next year. Once again, a very big thank you especially to the distinguished lecturers and hosting organizers who make the ComSoc DLT program a great success for the Asia Pacific region.

*Written by Ewell Tan  
IEEE Asia-Pacific Limited*

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