

IEEE Beijing Section Report 2018

PART A - SECTION SUMMARY

A.1 Executive Summary – (Please follow the format given below)

- Section Executive Committee Member List

Name	Roll	Email
Ruan Qiuqi	Chair	qqruan@bjtu.edu.cn
Zhou Mengqi	Vice Chair	zhou698@vip.sina.com
An Gaoyun	Secretary/Treasurer	an.gaoyun@gmail.com
Li Hua	Technical Activities Committee Chair	ihua@ict.ac.cn
Zhuo Li	Education Committee Chair	zhuoli@bjut.edu.cn
Hu Yinfu	Membership Development Committee Chair	huyinfu@hotmail.com
Wang Shengjin	Professional Activities Committee Chair	wsgsj@tsinghua.edu.cn
Qiu Xuejun	Humanitarian Technology Activities Committee Chair	xj7628@163.com
Liu Chenglin	Fellows Committee Chair	chenglin.liu@ia.ac.cn
Zhou Mengqi	Conference Committee Chair	zhou698@vip.sina.com
Ni Rongrong	Student Activities Committee Chair	rrni@bjtu.edu.cn
Zhang Man	Student Activities Committee Vice Chair	zhangman@nlpr.ia.ac.cn
Feng Lishuang	Women in Engineering Committee Chair	fenglishuang@buaa.edu.cn
Feng Jinjun	Industry Committee Chair	fengjj@ieee.org
An Gaoyun	Chapter Coordination Committee Chair	an.gaoyun@gmail.com
An Jianping	Proposal Committee Chair	an@bit.edu.cn
Jia Kebin	Education Accreditation Committee Chair	kebinj@bjut.edu.cn
Liu Yuanan	Awards & Recognition Committee Chair	yuliu@bupt.edu.cn

- Section Highlights
 - 1). Development of new members
 - 2). Sponsorship of international and national conferences
 - 3). Academic exchanges and communications
 - 4). Various activities were held by Chapters and Student Branches
- Major Events (International, National)
 - 1). Totally 10 international conferences have been sponsored or co-sponsored by Beijing section, they are:
 - 2018 IEEE International Conference on Progress in Informatics and Computing;
 - 2018 IEEE International Conference on Safety Produce Informatization (IICSPI 2018);
 - 2018 5th IEEE International Conference on Cloud Computing and Intelligence Systems (CCIS);
 - 2018 12th IEEE International Conference on Anti-counterfeiting, Security, and Identification (ASID);
 - 2018 IEEE 2nd International Electrical and Energy Conference (CIEEC 2018);
 - 2018 IEEE 3rd Advanced Information Technology, Electronic and Automation Control Conference (IAEAC 2018);
 - 2018 6th IEEE International Conference on Network Infrastructure and Digital Content;
 - 2018 1st IEEE International Conference on Hot Information-Centric Networking (HotICN 2018);
 - 2018 14th IEEE International Conference on Signal Processing (ICSP);
 - 2018 2nd IEEE Advanced Information Management, Communicates, Electronic and Automation Control Conference (IMCEC 2018);
- Major Chapter Activities

Event Title	Event Date
Preparing meeting for the 6th International Symposium on Electromagnetic Compatibility	2018/12/28 9:00

WiCAS forum by CASS Shenzhen Chapter	2018/12/25 14:00
Unconventional Physical Uncolnable Functions for IoT security	2018/12/20 10:20
DL talk by Prof. Ru Huang from Peking University (Academician of Chinese Academy of Sciences, IEEE fellow)	2018/12/19 10:00
STATE-OF-THE-ART EVOLUTIONARY ALGORITHMS FOR MANY OBJECTIVE OPTIMIZATION	2018/12/17 14:30
Machine-learning Enhanced Biomedical Data Analytics for Point-of-care Diagnosis System	2018/12/7 14:30
Interpretable Convolutional Neural Networks (CNNs) via Feedforward Design	2018/12/5 10:31
Power transformer technology	2018/11/26 8:30
Person Re-Identification: Challenges and Recent Advances	2018/11/25 21:30
IEEE SSCS Guangzhou Chapter technical seminar	2018/11/24 9:00
Introduction to Intelligent Transport Systems (ITS)	2018/11/20 16:00
Broad Overview of Low-Power Wake-up Radio Design	2018/11/16 14:00
Big Data Research and Applications & Informatics in Drug Discovery and Development:Challenges and Opportunities	2018/11/12 15:00
Some recent progress and applications in subwavelength photonics	2018/11/5 9:30
IEEE Beijing Section - Guangdong Chapter - VEH 2018 conference	2018/11/2 8:37
Cognitive HF Radar	2018/11/1 15:00
Propagation and scattering at HF : High fidelity modelling of the physical mechanisms underlying OTH radar, mission diversity and the design of effective OTH radar networks	2018/11/1 9:00
2018 Reliability Physics Annual Meeting of China	2018/11/1 9:00
Distributed Control and Decision Making Algorithms with Applications to Cooperative Robotics and Smart City Systems	2018/10/30 10:30
Light driven smart micro robotics	2018/10/27 10:00
High Reliability Demands of Electronic Devices: Simulation Design Methods of Multiple Physical Field Processes	2018/10/26 9:00
Colloidal quantum dots for optoelectronic applications	2018/10/22 14:00
Sequential Extreme Learning Machines for lass Imbalance and Concept Drift	2018/10/20 9:00
Atomic Layer Deposition to Nanostructured Energy Materials	2018/10/18 10:00
Integrated graphene photonic devices for optical interconnects	2018/10/18 10:00
High-performance field effect transistors based on multiple solution processing and the strain effects in the organic crystals	2018/10/15 9:30
Technical cosponsor the 26th National EMC Conference	2018/10/13 9:00
The latest research progress and open problem of evolutionary multi-objective optimization	2018/10/8 15:00
[Lecture] A Review of the Past 40 Years' Study and Scientific Research	2018/9/25 9:30
Report on Remote Sensing and Human Activities	2018/9/24 9:00
The decomposition-based evolutionary multiobjective optimization algorithm	2018/9/18 16:00
2018 the 3rd Optoelectronics Global Conference	2018/9/5 8:30
Committee meeting	2018/9/3 18:00
Code Quality Assurance for Large-Scale Software	2018/8/26 8:30
Concept of Image Fusion in Remote Sensing Applications	2018/8/21 10:00
Blockchain: Benefits, limitations, and a use case on enforcing data privacy	2018/8/16 10:00
Image processing for medical applications	2018/8/9 16:00
Modern inpainting strategies for reconstruction of missing data in images quality assessment	2018/8/9 14:00
2018 IEEE Electronic Exploration Camp in Guangzhou	2018/7/26 9:00
A mini-conference on EMC	2018/7/22 21:00

Power planning model for high renewable penetrated power system	2018/7/19 16:00
Full cost node pricing mechanism and its impact	2018/7/19 15:00
Optimization modeling and efficient algorithm of complex multi-energy coupling system	2018/7/19 10:00
Combined Heat and Power Dispatch Considering Pipeline Energy Storage of District Heating Network	2018/7/19 9:00
Seminar on Artificial Intelligence and Remote Sensing Technology	2018/7/15 8:00
Economic and Resilience Value of Adding Battery Capacity to Photovoltaic Array Generation	2018/7/4 15:00
Distinguished Lecture - The Essential Role and the Continuous Evolution of Modulation Techniques for Voltage-Source Inverters in the Past, Present, and Future of Power Electronics	2018/7/2 9:00
Things You Should Know Before Submitting Your Next Paper	2018/6/29 15:30
ISSCC 2019 Promotion Conference in IEEE SSCS Guangzhou Chapter	2018/6/28 8:55
[IEEE SPS GUANGZHOU CHAPTER] AU LECTURE " OPEN RESOURCE-AIDED SCENE CLASSIFICATION"	2018/6/19 15:00
IEEE CASS Shenzhen Chapter Technical Workshop	2018/6/19 9:00
Small-signal stability and enhancement of secondary frequency control in islanded microgrids	2018/6/14 9:30
IEEE CIS Beijing Chapter Distinguished Lecture	2018/5/31 16:30
Repetitive Control for PWM Inverters and Performance Improvement	2018/5/30 9:00
Face to 5G, embrace the future, the mobile communication and smart grid ICT technology from the perspective of chip technology	2018/5/24 10:00
computational high voltage engineering (CHVE)	2018/5/24 9:00
Technical Talk: Artificial Intelligence for Industry and Environment	2018/5/23 15:00
Distinguished Lecture - Increasing Energy Efficiency of Medium-Voltage Drives	2018/5/22 9:00
Applications of Computational Intelligence to Condition-Based Maintenance	2018/5/18 15:00
IEEE CASS Shenzhen Pre-ISCAS Workshop	2018/5/18 14:30
ComSoc Distinguished Lecture: Novel Modulation and Multiple Access Methods for 5G	2018/5/17 17:00
Novel Modulation and Multiple Access Methods for 5G	2018/5/17 17:00
The role of random access protocols for machine type communications	2018/5/12 10:00
The Mechanism of Partial Discharge and Its Application	2018/5/4 9:00
Software Testing and Evolution	2018/4/28 9:34
Most destructive attack strategies for networks	2018/4/27 10:00
Smart Grids: An Intellectual Exercise or a Practical Reality	2018/4/26 10:00
Lightning protection technology in renewable energy system	2018/4/23 9:00
The Miracle of Light and the Power of Photonics	2018/4/17 14:00
The 4th Lectures & Chapter Chair Meeting in China Council	2018/4/15 9:00
New Development of Smooth Projective Hash Function and Its Applications	2018/4/10 15:00
New Chair Election of GRSS Beijing Chapter	2018/4/2 9:00
Ultra-Low-Power Radios Using Current-Reuse/Function-Reuse/Ultra-Low- Voltage Techniques	2018/3/28 14:10
Report on Big Data Analysis and Processing-Scientific Issues and Practical Research	2018/3/28 9:00
Efficient Information Dissemination of 3D Mapping Data for Autonomous Vehicles	2018/3/8 11:00
Synchronization and Frustration in Coupled Oscillatory Circuits	2018/2/2 14:00
An Energy-Efficient Battery Parameter Extraction Technique	2018/1/17 9:00
Computational Approaches toward Better Drugs and Better Health Care	2018/1/9 10:00
Mining Human Periodic Behaviors Using Mobility Intentions	2018/1/9 9:00

- Major Student and Affinity Group Activities
- Awards
 - 1) 2018 Recognition Award Banners Gold Beijing Section
 - 2) 2018_Recognition_Award_Banners_Silver_Retention

A.2 Financial Report – (Please follow the format given below)

- Summary
As submitted in the NetSuite System
- Any other financial activities

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.
9915.
- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members
2018/01/30: The annual Executive Committee Meeting was held. 11 members of the Executive Committee attended this meeting. During the meeting, all the members discussed the plan of member developing and chapter establishing. And Chongqing Subsection was also agreed to be prepared and applied in 2018.
Totally 10 international conferences have been sponsored or co-sponsored by Beijing section. Among attendees attended these conferences, some of them are newly jointed IEEE members because of these conferences.

B.2 Chapter Activities

- Total number of Chapters in the Section
58
- Number of Chapters formed in the current year
0
- Number of active Chapters (Chapters who have reported required number of meetings during the year)
23
- Summary of Chapter activities (Chapter wise with attachment table/information
As attached above.

B.3 Professional and Continuing Education Activities

Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information

B.4 Students Activities

- Total number of Student Branches in the Section
14
- Number of Student Branches formed in the current year
0
- Section level student activities (student congress, paper and other contests, awards etc)
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year)
- Summary of Student Branch activities (Student Branch wise with attachment table/information)

B.5 Affinity Group Activities

- Young Professional (YP)

Event Title	Event Date
Lecture:Design of SDN Supported VANETs	2018/10/25 14:00
Integrating Technologies for Ambient Intelligence: Convergence of Artificial Intelligence, Machine Learning, Biometrics, Cloud Computing, Internet of Things, and Cyber-physical Systems	2018/6/1 15:00

- Women In Engineering (WIE)
- Life Member

B.6 Awards & Recognition Activities

- Award constituted by the Section
- Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year 2015
 - 1) 2018 Recognition Award Banners Gold Beijing Section
 - 2) 2018_Recognition_Award_Banners_Silver_Retention

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter (name and number of issues in the year)
- Home Page of the Section (give the URL and how often it is updated)
<http://ieee-beijing.org>
- Other means of contacts with Section members including social media

B.8 Industry Relations

- Membership growth and retention
- Activities for/with industrial members

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
- SIGHT Activities

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)”

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved
- Funding secured from the IEEE and external sources including sponsorships

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- Nature of relationship and details of any formal agreement signed
- Details of joint activities
- Benefit to IEEE members (for example discounts, access to technical information etc.)
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections
- Joint activities with any other Section

C.4 Support extended to Sub-sections & Society Chapters within the Section

- Support extended for organising technical, educational and professional activities
- Joint activities for membership development
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)**C.6 Problems anticipated and suggestions for solutions, if any****PART D - GOALS AND PLANS****D.1 Continuation of project/activity in progress and their implementation plans****D.2 Goals and Future Plans**

Our goal is to develop section members smoothly up to 10,000 in the near future and serves our members better by more academic activities, including conferences, workshops, seminars, visit exchanges etc.

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.**D.4. Business Plan for Sustainable Growth and Financial Stability.**