Indonesia Section Report

PART A - SECTION SUMMARY

A.1 Executive Summary

Advisory Board Member List (2021)
1. Prof. Dr. Ir. Wahidin Wahab (SM)
2. Dr. Arifin Nugroho (SM)
3. Prof. Dr. Ir. Dadang Gunawan (SM)
4. Ir. Arnold Ph Djiwatampu (LSM)
5. Arief Hamdani Gunawan, S.T., M.Si
6. Muhammad Ary Murti, S.T., M.T.
8. Satriyo Dharmanto, Ir., M.Si. (SM)
9. Prof. Dr. Ir. Fitri Yuli Zulkifli (SM)
10. Prof. Dr.Eng. Wisnu Jatmiko

Section Executive Committee Member List (2021)
- Chair: Dr.-Ing. Wahyudi Hasbi
- Vice Chair: Prof. Ir. Gamantyo Hendrantoro, PhD.
- Secretary: Prof. Ir. Linawati, MEngSc. PhD.
- Deputy Secretary: Dr. Karlisa Priandana
- Treasurer: Dr. Kemas Muslim Lhaksmana, S.T., M.ISD.
- Deputy Treasurer: Dr. Prima Dewi Purnamasari, S.T., M.T., M.Sc.

Activity Committee
- Membership Development Activities: Dodi Wisaksono, S.T.; M.Kom and Indra Riyanto, S.T., M.T.
- Chapter Activities: Ir. Endra Joelianto, Ph.D.
- Technical and Education Activities: Dr. Eng. Khoirul Anwar, S.T., M.Eng.; Muhfizaturrahmah, ST., M.Eng.
- Students Branch Activities: Amanda Julia Isa, S.T.; Muhammad Sabirin Hadis, S. Pd., M.T.
- Awards & Recognition Activities: Dr. Ir. Henri P. Uranus, M.T.; Ratna Mayasari, ST, MT
- Webmaster & Communication Activities: Dr. Adian Fatchur Roehim; Muhmad Rausyan Fikri, M. Eng
- Government Relations Activities: Dr. Denny Setiawan, S.T., M.T.; Dr. Agustan
- Conference Activities: Chaeriah Wael, MT; Dr. Medria Kusuma Dewi Hardhienata; Dr. I Dewa Made Wiharta; Azi Asfarian, S.Komp., M.Kom.
- Industry Relations Activities: Dr. Agnes Irwanti, S.E., M.Si.; Eddy Setiawan, MSTAS
- Professional Activities: Dr. Anggoro Widiawan
- Entrepreneurial & Triple Helix Networking Activities: Beno K. Pradekso
- Sponsorship & Endorsement Activities: Angga Risnando, M.Sc
- Humanitarian Technology and Community Activities: Dr. Diana Purwitasari; Dr. Dewi Liliiana.; Dr. Berlian Al Kindhi S.S.T., MT.
- Western Region Coordinators: Dani Gunawan, S.T., M.T.
- Eastern Indonesia Region Coordinators: Ir. Amil A. Ilham, S.T., M.IT., Ph.D.; Dr. Kalvein Rantelobo
- Affinity Group
  - Young Professional: Cleossa Lydwina Agdy Putri, S.E.; Afdhal Azmi
  - SIGHT on eHealth and Telemedicine Indonesia: Dr. dr. Yoke Saadia Irawan, M.T.; Allya Paramita Koesoema, S.T., M.T., Ph.D.

Indonesia Section Chapters
1. Communications Society Chapter COM19 (CH10273) Chair: Dr. Wiseto Agung
2. Computer Society Chapter C16 (CH10784) Chair: Dr. Ford Lunban Gaol
3. Circuits and Systems Society Chapter CAS04 (CH10358) Chair: Dr. Tutun Juhana, ST., MT.
IEEE Indonesia section, which is a part of IEEE global, has been established since 16 February 1988. It currently has about 2983 (Feb 2022) active members and has been awarded 2021 Outstanding Section Membership Recruitment and Retention performance from IEEE Headquarter. This number increases significantly from the previous period. In addition, in 2021 there was not only improvement on number of active members but also six (6) New Student Branches.

In year 2021, IEEE Indonesia Section has run more than 200 activities, even more if all OUs actively input and report them in VTools. The Section has several important events at national level and international level. At national level, the signing MOU with Directorate General of Higher Education, Republic of Indonesia is one of major event, as the event triggered most education institutions (private and public ones) to have cooperation and collaboration with the Section. Moreover there were three events that opened and attended by the Minister of Republic Indonesia, and two of them had more than 1000 participants and were covered by many online media. At the international level, the Section run IEEE Innovation Nation Program for the first time. Chapters, Student Branch, and Affinity Group also had several major and remarkable events. Finally the Section guarantee awards to the member, chapter, and student.

### A.2 Financial Report

| 75080 - Bank BNI INDONESIA (USD) Checking (Account No 887731429) |
|---------------------------------|----------------|----------------|
| **Beginning Balance** | **51,271.41** |
| **Revenue/Cost** | **Task Number** | **Amount** |
| Revenue | 3.32.030 | 030 Member & Geographic Activities | 495.00 |
| Revenue | 3.45.000 | 000 Non-IEEE CB Account Interest | 27.48 |
| Revenue | 3.85.000 | 000 Bank Account Transfers (incoming) | 29,881.00 |
| Cost | 5.60.010 | 010 Bank & Credit-Card Fees | (35.53) |
| **Total Revenue** | **30,403.48** |
| **Total Cost** | **81,639.36** |
PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.

It currently has about **2,983 (Feb 2022) active members:** there are 1,735 members, 67 senior members, 701 student members, 55 associate members, 395 graduate student members, 7 life members, 4 life senior members, 17 affiliate members, and 2 others. It shows significant increase of member number, when compares to end of October 2021 and end of 2020. In Oct 2021, total number is **2,640 active members,** i.e. 49 Associate Members, 309 Graduate Student Members, 7 Life Members, 4 Senior Members, 1,597 Members, 62 Senior Member, 598 Student Members, and 14 Affiliate. Then in 2020, it had **2,402 active members:** there are 1,398 members, 55 senior members, 491 student members, 56 associate members, 365 graduate student members, 8 life members, 5 life senior members, and 24 affiliate members.

- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members

Indonesia Section has done several innovative initiatives below that prove the retention and growth of members.

- Bridging student and lecturer internship programs in various industries and Indonesian research institutions. Then Support and facilitate the participation of IEEE Indonesia's Student Branch in IEEE contests and events.
- Hold a free IEEE Conference Quality Management workshop regularly.
- Provide new payment system for membership fee [https://ieee.id/membership/payment-via-ieee-is/](https://ieee.id/membership/payment-via-ieee-is/) that assists all members and new members who don’t have credit card or others electronic payment account.
- Strengthen relationships and collaborations internally between section, chapters, affinity groups, student branch, and externally as a penta-helix collaboration.
- Committee of IEEE Indonesia Section includes government, industry, academic, entrepreneurs, students, young and professionals, gender representatives, and others. The Section keep conducting several workshops that involved them to bridge the gap between IEEE and them.
IEEE Indonesia Section has focused conducting several activities in East of Indonesia and 3T (frontiers, outermost, and least developed regions), to give benefit to them.
IEEE Indonesia Section supports in forming new Sub-Sections, Chapters and new Student Branches in Indonesia and keep monitoring their vitality.

B.2 Chapter Activities

- Total number of Chapters in the Section
  Currently, Indonesia Section has 14 Chapter and 6 Joint Chapters.

- Number of Chapters formed in the current year
  Only one Chapter is formed this year, i.e. The Indonesia Section, Oceanic Engineering and Technology and Engineering Management Joint Societies Chapter (CH10963)

- Number of active Chapters
  Totally there are 13 Chapters reported their activities in VTools, however only 12 Chapters have hold two technical meetings in 2021. Thus number of active Chapter is 12.

- Summary of Chapter activities
  Most Chapters activities number increased, beside of their own activities they plan, they also involved actively in the conference as a good impact of new options of the LOAs. Below are activities of the Chapters in 2021.

1. Communications Society Chapter COM19 (CH10273) : **45 activities**
2. Computer Society Chapter C16 (CH10784) : **5 activities**
3. Circuits and Systems Society Chapter CAS04 (CH10358) : **12 activities**
4. Engineering in Medicine and Biology Society Chapter EMB18 (CH10357) : **9 activities**
5. Power and Energy Society Chapter PE31 (CH10737) : **7 activities**
6. Solid State Circuit Chapter SSC37 (CH10652) : **3 activities**
7. Education Society Chapter E25 (CH10781) : **5 activities**
8. Power Electronics Society PEL35 (CH10782) : **NA**
9. Signal Processing Society SPO1 (CH10778) : **NA**
10. Electron Devices Society ED15 (CH10788) : **11 activities**
11. Society of Social Implication of Technology SIT30 (CH10770) : **8 activities**
12. Computation Intelligence Society CIS11 (CH10880) : **11 activities**
13. Systems, Man, and Cybernetics Society SMC28 (CH10882) : **NA**
15. Joint Societies Chapter The Indonesia Section, Oceanic Engineering and Technology and Engineering Management (CH10963) : **NA**
17. Joint Microwave Theory and Techniques/Antennas and Propagation Society MTT17/AP03 (CH10458) : **NA**
18. Joint Chapter Control Systems/Robotics and Automation SocietyCS23/RA24 (CH10808) : **NA**
19. Joint Chapter Instrumentation and Measurement IM09 and Information Theory IT12 (CH10929) : **11 activities**
20. Joint Chapter Vehicular Technology VT06 and Intelligent Transportation Systems ITS38 (CH10930) : **1 activities**

B.3 Professional and Continuing Education Activities

Total number of professional lectures/ seminars/ workshops /technical activities/conferences conducted by Indonesia Section from November 2020 to December 2021 is 105. It consists of 15 conferences, 6 distinguished lecture programs, and 98 workshops/trainings/seminars. Most activities can be seen on Youtube channel of Indonesia Section, [https://www.youtube.com/c/IEEEIndonesia](https://www.youtube.com/c/IEEEIndonesia), and the information on the website and social media channels, i.e. [https://ieee.id/](https://ieee.id/), [https://www.facebook.com/IEEEIndonesia/](https://www.facebook.com/IEEEIndonesia/), [https://twitter.com/IEEEIndonesia](https://twitter.com/IEEEIndonesia), and [https://www.instagram.com/ieee.indonesia/](https://www.instagram.com/ieee.indonesia/). List of the activities can be seen in the attachment of this report.
B.4 Students Activities

- Total number of Student Branches in the Section

Indonesia Section has 30 Student Branches, and 24 Student Branch Chapters / Student Branch Affinity Groups. They are Universitas Indonesia (STB04391); Institut Teknologi Sepuluh November (STB06401); Institut Teknologi Bandung (STB07091); Telkom University (STB06341), Universitas Gadjah Mada (STB09561); Universitas Bina Nusantara (STB11381); Universitas Diponegoro (STB16221); Politeknik Mekatronika Sanata Dharma (STB17391); Universitas Dian Nuswantoro (STB17511); Udayana University (STB17451); Institut Teknologi Nasional (STB17541); Swiss German University (STB17571); Universitas Pendidikan Indonesia (STB17661); Institut Teknologi Indonesia (STB17731); Atma Jaya Catholic University of Indonesia (STB17741); Universitas Islam Indonesia (STB17751); University of Sumatera Utara (STB17811); Universitas Hasanuddin (STB17951); Universitas Brawijaya (STB18281); STMIK AMIKOM Yogyakarta; Universitas Syiah Kuala (STB1035); Universitas Merdeka Malang (STB10072); STMIK AKBA; Bogor Agricultural University (IPB); Universitas Padjajaran; Universitas Pakuan; Universitas Nusa Putra; Universitas Negeri Yogyakarta; STMIK AKAKOM Yogyakarta; and Universitas Raharja (STB99974).

- Number of Student Branches formed in the current year

There are 6 Student Branches formed in the year 2021, i.e. Universitas Padjajaran; Universitas Pakuan, Universitas Nusa Putra, Universitas Negeri Yogyakarta, STMIK AKAKOM Yogyakarta, and Universitas Raharja

- Section level student activities (student congress, paper and other contests, awards etc)

1. Guest lecture Digital System and Beyond, speaker Dr. Namal Arosha S. Senanayake Mudiyanselage, Universiti Brunei Darussalam was on March 17, 2021, by STB11381 - Bina Nusantara University. Professional (Other) event. IEEE Attended: 12 and Guests Attended: 23

2. Nanosat Design Workshop 1st Sessions, was on March 19, 2021, by SBC06341 - Telkom University,GRS29. It was a technical event to provide students the know-how for designing the small satellite. IEEE Attended: 10 and Guests Attended: 306. Speakers: Dr. Heru Wiyanto; Dr. Ing. Wahyudi Hasbi; and Dr. Arifin Nugroho.


4. IEEE Day celebration on Oct 16, 2021 that was followed by IEEE Technical Society Talk on Leveraging Technology for A Better Tomorrow and IEEE Student Branch Pitching Contest. These events were joined by 212 participants, hosted by IEEE SB Udayana University.

5. IIEEssential: "IEEE Student Essential Education and Development Training Day“, was on 03 July 2021, and a collaboration event between IEEE SB UNDIP STB16221 and IEEE SB UGM STB09561 to share about IEEE membership, training, self and career development through professionals.

6. The 2021 International Student Conference on Electrical and Computer Engineering, on 28/10/2021, by STB17451 - Udayana University.

9. IEEE IS Annual Meeting, on 18 Dec 2021, Agenda: 1)Panel Discussion: Theme: Digital solutions to recover together, recover stronger; 2) IEEE IS Report; 3) Organizational Unit Report; 4) IEEE
Indonesia Section Member Meeting. Speakers: Dr. Eng. Hary Budiarto MKom. IPM. Kepala Badan Penelitian dan Pengembangan SDM, Kementerian Komunikasi dan Informatika& Ir. Satriyo Dharmananto, MSi. CEO PT. Multikom Global Mediatama. Participants: 278. Hosted by SB Universitas Pakuan.

- Number of active Student Branches (Student Branches who have reported required number of meetings during the year)
  Among 30 Student Branches, only 10 Student Branches below have reported their activities in the VTools.
  1. STB99382 - Nusa Putra University: 17 activities
  2. STB11476 - Bogor Agricultural University: 3 activities
  3. STB11381 - Bina Nusantara University: 3 activities
  4. SBC06341 - Telkom University, GRS29: 3 activities
  5. STB16221 - Diponegoro University: 4 activities
  6. STB99974 Raharja University: 6 activities
  7. IEEE SB UGM STB09561: 1 activity
  8. STB99076 SB Pakuan University: 4 activities
  9. STB17751 - Universitas Islam Indonesia: 12 activities
  10. STB17451 - Udayana University: 5 activities

- Summary of Student Branch activities

  Number of events that were organized by Student Branch is 57 from January 2021 until December 2021.
  1. Launching IEEE SB Nusa Putra University, was on Jan 16, 2021, with 15 IEEE attendees.
  3. Meeting 2nd Preparation of Launching IEEE SB Nusa Putra University, was on Jan 9, 2021, organized by STB99382 - Nusa Putra University, with IEEE Attended: 12.
  4. Election for Executive Committee was organized by STB99382 - Nusa Putra University, on Jan 30, 2021, with IEEE Attended: 12.
  5. 1st meeting about constitution IEEE Student Branch Nusa Putra University was on Feb 6, 2021, organized by STB99382 - Nusa Putra University, with IEEE Attended: 12.
  6. Prepare Welcome Back Ceremony in the semester was on Feb 6, 2021, by STB99382 - Nusa Putra University, with IEEE Attended: 12.
  7. Meeting Constitution 2nd, type of Administration – Excom event, was on Feb 13, 2021, by STB99382 - Nusa Putra University, with IEEE Attended: 12.
  8. Meeting 2nd Prepare Welcome Back Ceremony was conducted by STB99382 - Nusa Putra University, on Feb 13, 2021, with IEEE Attended: 10.
  9. Welcome back ceremony, give new spirit to student in Nusa Putra University, was on Feb 20 2021, by STB99382 - Nusa Putra University, with IEEE Attended: 10 and non IEEE: 20.
  10. Socialize FUTURE50 to student in Nusa Putra University, was on Feb 20 2021, by STB99382 - Nusa Putra University, with IEEE Attended: 10 and non IEEE: 30.
  11. Socialize FUTURE50 to lectures and students in Information Technology and Information System Study Program Nusa Putra University, was on Feb 27, 2021, by STB99382 - Nusa Putra University, with attendees of IEEE member: 20 and non IEEE: 50.
  12. Pengenalan Divisi Keilmuan Departemen Ilmu Komputer IPB University, was on Feb 27, 2021, attended by IEEE member : 11 and non IEEE: 105. The event to introduce research area, lab, and student community which was organized by STB11476 - Bogor Agricultural University.
  13. 3rd socializing FUTURE50 to all student in Nusa Putra University, was on Feb 27, 2021, by STB99382 - Nusa Putra University, with attendance of IEEE member: 20 and non IEEE: 70.
  14. Meeting Prepare Webinar Menulis Jurnal Internasional, was on 28 Feb 2021, by STB99382 - Nusa Putra University, with attendance of IEEE member: 12.
  15. Webinar Menulis Jurnal Internasional, was on 06 Mar 2021, by STB99382 - Nusa Putra University. It was Technical Event, with attendance of IEEE member: 50 and non IEEE: 130.
  16. Meeting Prepare Webinar Peluang dan Tantangan Pemanfaatan Energi Baru Terbarukan Indonesia was on 06 Mar 2021 by STB99382 - Nusa Putra University, type of Administrative > ExCom event. It was attended by IEEE member: 12.
  17. Prepare international Conference ICEEE was on March 7, 2021, by STB99382 - Nusa Putra University. Administrative > ExCom event. It was attended by 12 IEEE members.

19. **Guest lecture Digital System and Beyond**, speaker Dr. Namal Arosha S. Senanayake Mudiyanselage, Universiti Brunei Darussalam was on March 17, 2021, by STB11381 - Bina Nusantara University. Professional (Other) event. IEEE Attended: 12 and Guests Attended: 23.

20. **Nanosat Design Workshop 1st Sessions**, was on March 19, 2021, by SBC06341 - Telkom University, GRS29. It was a technical event to provide students the know-how for designing the small satellite. IEEE Attended: 10 and Guests Attended: 306. Speakers: Dr. Heru Wiyanto; Dr. Ing. Wahyudi Hashi; and Dr. Arifin Nugroho.


23. **Sharing Overleaf IEEE Template University** to discuss the use of overleaf in article templates according to the IEEE template provisions. Date of event was Oct 17, 2021. Speakers were Regina, University of Raharja; Marviola, University of Raharja, by STB99974 - University of Raharja. Nontechnical > Pre-University Activities. IEEE Attended: 19 and Guests Attended: 40.


25. SATFEST 4.0. Theme: Basic Introduction to Remote Sensing in Satellite, was by SBC06341 - Telkom University, GRS29 and Satcomradar Laboratorium Nano Satelit Universitas Telkom, on 03 July 2021. It was a technical event with speakers: Dra. Maryani Hartuti, M.Sc of LAPAN; Muhammad Purwa Manggala of Telkom Indonesia, with IEEE Attended: 0 and Guests: 134.

26. Natural Language Processing, Branch of Artificial Intelligence Science is an IEEE STB99076 SB Pakuan University event and collaborate with ComStrac-DSC Universitas Pajakun. Continuing Education. Speakers: Prof. Madya Dr. Noor Azah Binti Samsudin, Universiti Tun Hussein Onn Malaysia; Dr. Eng. Ayu Purwarianti, S.T., M.T., Head of AI Center ITB; Ismail Fahmi, PhD is a founder Empirit. It was on 14 July 2021 with IEEE Attended: 6 and Guests Attended: 806.

27. Workshop on Artificial Intelligence (AI) Applications in Remote Sensing, on 31/07/2021, by STB17751 - Universitas Islam Indonesia

28. Kuliah Umum Pertanian Cerdas dan Agro-maritim Presisi, on 24/08/2021, by STB11476 - Bogor Agricultural University

29. Webinar EE#5: Introduction to Fiber Optic Technology (DWDM and OTN), on 28/08/2021, STB17751 - Universitas Islam Indonesia

30. IEEE Elevate: Kickstart Your Career Journey, on 05/09/2021, by STB16221 - Diponegoro University


32. Artificial Intelligence (AI) Application in Electrical Power Engineering, on 25/09/2021, by STB17751 - Universitas Islam Indonesia

33. Known PLTS with Blockchain, on 02/10/2021, by STB99974 - University of Raharja

34. Comparative Study : Universitas Islam Indonesia, on 03/10/2021, by STB17751 - Universitas Islam Indonesia

35. Let’s Find Out about Tips on Building a Startup, on 03/10/2021, by STB99076 - Pakuan University

36. Webinar Sensor Ferroelektik Serta Strategi Perlindungan dan Permohonan Paten, on 07/10/2021, by STB11476 - Bogor Agricultural University

37. Education Project, on 07/10/2021, by STB17751 - Universitas Islam Indonesia

38. IKEE Day 2021 preparation, on 08/10/2021, by STB17451 - Udayana University

39. Celebration IEEE Day 2021, on 16/10/2021, attended by STB99974 - University of Raharja

40. IEEE Day Celebration 2021 Indonesia Section, on 16/10/2021, hosted by STB17451 - Udayana University

41. IBITEC 2021 : Universitas Islam Indonesia 20/10/2021 08:00 STB17751 - Universitas Islam Indonesia
B.5 Affinity Group Activities

Indonesia Section has three affinity groups. Below are their activities.

- Young Professional (YP)
  1. The PROVE (Professional Development Workshop, Build Your Early Career) was held on Feb 20, 2021, with 127 participants.
  2. The IEEE Indonesia Section Young Professionals Outreach and SICOVID-19. Training is aimed to provide online meet up activity for YP members in Indonesia, to promote IEEE to the general public, in this case, local communities in South and West Jakarta cities, and introduced SICOVID-19 to local Covid-19 Task Forces. Speaker: Indra Riyanto, Universitas Budi Luhur. It was organized by YP00059 - Indonesia Section Affinity Group, and part of a Professional > Professional (Other) event, on June 10 2021, with IEEE Attended: 7 and Guests Attended: 67.
  3. IEEE Indonesia Section, Excom, Chapters, Affinity gathering and VTools Reporting workshop on Feb 20, 2021 with 19 attendees. The workshop aims to train chapters committee to use VTools for reporting.

- Women In Engineering (WIE) and the SIGHT on eHealth and Telemedicine Indonesia
  All the activities below were conducted by collaboration of the Women In Engineering (WIE) and the SIGHT on eHealth and Telemedicine Indonesia.
  1. Talkshow on ISPO 2021 STEM: Its Beauty in Life and Career. Date and time: 19 February 2021, by WIE Indonesia Section. Brief description of activity: Promoting STEM Career among ISPO Participants (Pre- University Students). Participants: 53, IEEE Members= 1, Non-IEEE Members = 52. This event was organized in collaboration with the SIGHT.
  2. Webinar Inspiring and Outstanding Women in Engineering, commemorating Kartini’s spirit. Date and time: 21 April 2021, by WIE Indonesia Section. Brief description of activity: Commemorating Kartini's Spirit by Presenting Outstanding Women in Engineering Career. Participants: 228: 27 IEEE member, 201 non IEEE Member. Speakers: Dian Siswarini (CEO XL Axiata, Telco Company), Moorissa Tjokro (TESLA Software Engineer), Ayu Purwarianti (NLP Expert, ITB), keynote speaker by the Minister of Women Empowerment and Children Protection – Republic of Indonesia. This event was organized in collaboration with the SIGHT.
  3. Digital Campaign – Inspiring Women in Engineering, August Edition on WIE Indonesia Section Instagram, Brief description of activity: Digital Campaign for promoting STEM by
Introducing outstanding and Inspiring Women In Engineering career. This event was organized in collaboration with the SIGHT.


5. WIE Leaders Recommendation forum, Date and time: 4 October 2020. Brief description of activity: Ibu Dewi Liliana represented WIE Indonesia delivered WIE leader in Region 10 advise and success story to inspire participants in SYWL R10 congress. Participants: 50 SYWL 2020 participants

6. Internal Meeting – Coaching and Sharing, on 16 Jan 2021. Brief description of activity: this activity is online meeting among the WIE Indonesia Member and the SIGHT Member. Mostly they discuss about working life, planning, humanitarian activities, and coaching each others. Participants: 5 participants.

7. Internal Meeting – Coaching and Sharing, on 21 March 2021. Brief description of activity: this activity is online meeting among the WIE Indonesia Member and the SIGHT Member. Mostly they discuss about working life, planning, humanitarian activities, and coaching each others. Participants: 10 participants.

8. Internal Meeting – Coaching and Sharing, on 10 April. Brief description of activity: this activity is online meeting among the WIE Indonesia Member and the SIGHT Member. Mostly they discuss about working life, planning, humanitarian activities, and coaching each others. Participants: 7 participants.

9. Internal Meeting – Coaching and Sharing, on 30 May 2021. Brief description of activity: this activity is online meeting among the WIE Indonesia Member and the SIGHT Member. Mostly they discuss about working life, planning, humanitarian activities, and coaching each others. Participants: 5 participants.

10. Internal Meeting – Coaching and Sharing, on 15 August 2021. Brief description of activity: this activity is online meeting among the WIE Indonesia Member and the SIGHT Member. Mostly they discuss about working life, planning, humanitarian activities, and coaching each others. Participants: 6.

11. Internal Meeting – Coaching and Sharing, on 10 Oct 2021. Brief description of activity: this activity is online meeting among the WIE Indonesia Member and the SIGHT Member. Mostly they discuss about working life, planning, humanitarian activities, and coaching each others. Mostly we discuss about working life, WIE planning, and coaching each others. Participants: 9.

12. Internal Meeting – Coaching and Sharing, on 7 Dec 2021. Brief description of activity: this activity is online meeting among the WIE Indonesia Member and the SIGHT Member. Mostly they discuss about working life, planning, humanitarian activities, and coaching each others. Mostly we discuss about working life, WIE planning, and coaching each others. Participants: 5.

13. HAC Global Summit, Date and time: 10 November 2021. Brief description of activity: Ibu Dewi Yanti Liliana represent WIE Indonesia was sharing the success story of WADI (Women Against COVID 19 in Indonesia) that was funded by IEEE Foundation and HAC Covid special project. Ibu Dewi is the chair of the project. Participants: 60 HAC Summit 2021 participants

- Life Member (LM): NA

B.6 Awards & Recognition Activities

- Award constituted by the Section

Indonesia Section has granted awards to the top three active chapters, active members who have published in IEEE journals in 2021, and to the Student Branch that won competition or contest. The award celebration was conducted on IEEE IS celebration day, IEEE Day, and IEEE annual member gathering.

- Please list all Awards and Recognitions received by the Section, and members in the Section, from R10 and IEEE HQ during the year

Indonesia Section received 2021 Outstanding Section Membership Recruitment and Retention Performance Award.
B.7 Communication Activities

- Newsletter (name and number of issues in the year):
  IEEE Indonesia Section uses social media and webpage to share the information of IEEE Indonesia activities instead of Newsletter. The social media consist of Facebook, Twitter, and youtube with accounts: @ieeeindonesia and Instagram @iee.indonesia. These social media strengthen the member engagement in Indonesia and also could reach a broader audience.

- Home Page of the Section
  Indonesia Section uses Whatsapp, email info@ieee.web.id, and e-Notice as communications media. It also uses website https://ieee.id/, Youtube channel https://www.youtube.com/c/IEEEIndonesia, Facebook https://www.facebook.com/IEEEIndonesia/, Twitter https://twitter.com/IEEEIndonesia, and Instagram https://www.instagram.com/ieee.indonesia/ to share information to the members and public. All the media is updated regularly, at least monthly.

B.8 Industry Relations

- Membership growth and retention
  In fact membership growth and retention of industry member improve significant, as the innovative works have been done by the Section (see B1). In most activities, there were industry members involved, as well as in the committee member, such as in the Chapters, Affinity Groups, and Young Professional.

- Activities for/with industrial members
  As mention above that industrial members actively involved in all activities, such as activities for industrial members, activities with industrial members, and activities conducted by industrial members. Below are some examples.

1. Excom meeting with ITDRI-Indonesia Telecommunication & Digital Research Institute on March 31, 2021 with 2 attendees, for the cooperation opportunities.
2. Excom meeting with Industry PT. 247 on Feb 25, 2021 with 8 attendees, discussing cooperation opportunities to provide industry apprenticeship for IEEE Student Members as part of Merdeka Belajar Kampus Merdeka (freedom to learn, independent campus) Program.
3. IEEE Indonesia Section, Excom meeting with Industry PT. 247 on July 28, 2021 with 5 attendees, discussing the progress of cooperation.
4. A Professional event, training on 5G Radio Network and Parameter Planning, was organized by Communications Society Chapter COM19, on 7 Nov 2020. This training was held in collaboration with Fastconn and Techbros with 21 attendees (1 IEEE member and 20 non – IEEE), that was part of the 5G Training for Covid 19 series.
5. National Symposium for Information Technology Students (SIMPATI) on bioinformatics, cloud computing, computational intelligence, computer vision, data mining, information retrieval, DSP, HCI, image processing, and networks was attended by 150 (2 IEEE members and 148 non IEEE). This technical event was on Nov 10, 2020 by Industrial Electronics Society IE13 (CH10902), with speakers Dr. Diana Purwitasari and Andreas Febrian, Ph.D.
6. 5G and the Role of Electrical Engineers in Developing Indonesia's Digital Transformation, on 26 June 2021, 09.00 - 15.30 (GMT+7), by Government Relations & Industry Relations, Indonesia Section. Brief description of activity: 5G and the Role of Electrical Engineers in Developing Indonesia's Digital Transformation to sharpen the role of Indonesian Electrical Engineers in facing the presence of 5G technology, the possibilities of TKDN from the device certification process, security certification, and HR certification, as well as basic 5G-related capability workshops. This event was initiated by Dr. Denny Setiawan, collaborate with BKE PII. Participants: 1190.
7. Women in Digital Entrepreneurship, with 1054 participants. The collaboration was between the International Telecommunication Union, IEEE Indonesia Section, the Ministry of Communication and Information Technology – Republic of Indonesia, and Google Indonesia. The event conducted by Industry and Government Relation.
8. Webinar Inspiring and Outstanding Women in Engineering, commemorating Kartini’s spirit. Date and time: 21 April 2021, by WIE Indonesia Section. Brief description of activity: Commemorating Kartini's Spirit by Presenting Outstanding Women in Engineering Career. Participants: 228; 27 IEEE member, 201 non IEEE Member. Speakers: Dian Siswarini (CEO XL Axiata, Telco Company), Moorissa Tjokro (TESLA Software Engineer), Ayu Purwarianti (NLP Expert, ITB),...
keynote speaker by the Minister of Women Empowerment and Children Protection – Republic of Indonesia.

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
  Some activities that have been organized by collaboration of OUs of Indonesia Section were Humanitarian Technology related activities, such as below.

  1. The IEEE Indonesia Section Young Professionals Outreach and SICOVID-19. Training is aimed to introduce SICOVID-19 to local Covid-19 Task Forces. It was organized by YP00059 - Indonesia Section Affinity Group, on June 10 2021, with IEEE Attended: 7 and Guests Attended: 67.
  2. Women in Digital Entrepreneurship, with 1054 participants. The collaboration was between the International Telecommunication Union, IEEE Indonesia Section, the Ministry of Communication and Information Technology – Republic of Indonesia, and Google Indonesia. The event conducted by Industry and Government Relation. This event was intended to increase capacity women in digital entrepreneurship, and to encourage the growth of women in Science, Technology, Engineering, and Math (STEM) in the era of pandemic.

- SIGHT Activities
  There are quite lot of activities from the SIGHT in collaboration with other OUs and with WIE Indonesia Section, as listed above (see. B5).

B.10 Community Activities

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

  1. Celebration 33rd Anniversary of IEEE Indonesia Section on Feb 20, 2021 with 127 participants. The event was continued with PROVE (Professional Development Workshop, Build Your Early Career), and Award Ceremony.
  3. IEEE Day celebration on Oct 16, 2021 that was followed by IEEE Technical Society Talk on Leveraging Technology for A Better Tomorrow and IEEE Student Branch Pitching Contest. These events were joined by 212 participants.
  4. IEEE IS Annual Meeting, on 18 Dec 2021, Agenda: 1)Panel Discussion; Theme: Digital solutions to recover together, recover stronger; 2) IEEE IS Report; 3) Organizational Unit Report; 4) IEEE Indonesia Section Member Meeting. Participants: 278.

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved

Four events below are special and bring important outcomes for the IEEE Indonesia Section. All the events have extended the expose of the IEEE widely to education institutions (public and private institutions), industries, NGOs, gender perspectives, young generations, and other community. Three events were attended and opened by the Minister of Information Communication of Republic of Indonesia, Deputy of the Minister of Women Empowerment of Republic of Indonesia, and Director General of Higher Education. In term of participants, two events were attended by more than 1000 participants and covered by many online media. The outcome for these events are significant membership growth, increase of student branches, more penta-helix collaboration for activities management, active involvement of the Section Chair in Directorate General of Higher Education to give recommendation for future education in Indonesia, active participation of the Section in all Government Sectors, and many more cooperation – collaborations invitations from many institutions/industries to come.
2. Webinar Inspiring and Outstanding Women in Engineering, commemorating Kartini’s spirit. Date and time: 21 April 2021, by WIE Indonesia Section. Brief description of activity: Commemorating Kartini's Spirit by Presenting Outstanding Women in Engineering Career. **Participants: 228: 27 IEEE member, 201 non IEEE Member.**
3. 5G and the Role of Electrical Engineers in Developing Indonesia's Digital Transformation, on 26 June 2021, 09.00 - 15.30 (GMT+7), by Government Relations & Industry Relations, Indonesia Section. Brief description of activity: 5G and the Role of Electrical Engineers in Developing Indonesia's Digital Transformation to sharpen the role of Indonesian Electrical Engineers in facing the presence of 5G technology, the possibilities of TKDN from the device certification process, security certification, and HR certification, as well as basic 5G-related capability workshops. This event was initiated by Dr. Denny Setiawan, collaborate with BKE PII. **Participants: 1190. This event was published in many online media.**
4. Women in Digital Entrepreneurship, on 21-22 April 2021, by Government Relations & Industry Relations, Indonesia Section. Brief description of activity: Women in Digital Entrepreneurship was held on 21 and 22 April 2021. This event was held for commemorating Kartini Day on 21 April 2021, and as part of global event the ITU 10th #GirlsInICT. The collaboration was between the International Telecommunication Union, IEEE Indonesia Section, the Ministry of Communication and Information Technology – Republic of Indonesia, and Google Indonesia. This event was intended to increase capacity women in digital entrepreneurship, and to encourage the growth of women in Science, Technology, Engineering, and Math (STEM). **Participants: 1054. This event was published in many online media.**

- Funding secured from the IEEE and external sources including sponsorships
  All the activities have got funding from the IEEE and other sources. Recently IEEE Indonesia Section has stability in term of finance (see A.2.).

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

IEEE Indonesia Section has a good collaboration with Industries, NGOs, and National Societies, such as PII (Indonesia Engineers Societies), Gender Perspective Association, ISPO (Indonesian Science Project Olympiad) Society (https://ispo.or.id/), APTIKOM (Indonesian Association of Higher Education in Computer Science) and FORTEI (Indonesian National Electrical Engineering Forum). BKE PII. IEEE Indonesia Section has involved in several meetings with an International Society such as KDE from Korea. The Section has several joined activities with these societies and will intend to sign formal agreement for example with PII. These will bring benefits to the IEEE Member such as sharing the technical information, experience recognition and membership level (IEEE and PII), discounts for the events registration, facilitating of internships, etc. Thus it will bring benefit to the Section, such as membership growth, promotions, facility sharing and saving, expert sharing, involvement in nation development, and network expanded.

**C.3 Collaboration with other IEEE Sections**

List of activities above has shown good collaborations with Chapters and Affinity Groups from other Sections. Most of them are joint activities in term of conference, seminar, distinguished lecture program, workshop, and training programs. One example of the activities is ‘IEEE Virtual Distinguished Lecturer (VDL) Talk: "Connecting Space Assets to the Internet: Challenges and Solutions": New York Section Chapter,COM19, which conducted by CH01082 - New York Section Chapter,COM19, CH05171 - Fort Worth Section Chapter, COM19, CH04061 - Twin Cities Section Jt. Chapter, SP01/COM19, R20035 - Philadelphia Section, CH10557 - Bangladesh Section Chapter, COM19, CH01606 - Harbin Section Chapter, COM19, CH03179 - Jamaica Section Chapter, COM19, CH06201 - Foothill Section Chapter,COM19, CH02088 - Pittsburgh Section Jt Chapter, VT06/COM19, CH03051 - Malaysia Section Jt Chap, VT06/COM19, CH02009 - Baltimore Section Chapter, COM19, CH07041 - Toronto Section Chapter, COM19/VT08 Austin, CH10189 - Thailand Section Chapter, COM19, CH01231 - Binghamton Section Chapter, COM19, CH10273 - Indonesia Section Chapter,COM19, CH10271 - Northern Australia Section Jt. Chap, MT17/COM19, CH06125 - Oakland-East Bay Section Chapter, COM19, CH06087 - Santa Clara Valley Section Chapter,COM19,
C.4 Support extended to Sub-sections & Society Chapters within the Section

IEEE Indonesia supports in forming new Sub – Sections both in the Eastern Indonesia and Western Indonesia. Several meetings have been conducted with the Western Region Coordinators (Dani Gunawan, S.T., M.T.), Eastern Indonesia Region Coordinators (Ir. Amil A. Ilham, S.T., M.IT., Ph.D. and Dr. Kalvein Rantelobo), Advisory Boards, and in general meeting with all committee members. However its progress is quite slow due to many reasons. The support of the Section for new sub-sections and society chapters has been one of the work programs 2021.

C.5 Best Practices of your Section

- Bridging student and lecturer internship programs in various industries and Indonesian research institutions.
- Support, facilitate the participation of IEEE Indonesia's Student Branch in IEEE contests and events, and providing award to the winners.
- Hold a free IEEE Conference Quality Management workshop regularly.
- Provide new payment system for membership fee https://ieee.id/membership/payment-via-ieee-is/ that assists all members and new members who don’t have credit card or others electronic payment account. They can do payment in local currency.
- Strengthen relationships and collaborations internally between section, chapters, affinity groups, student branch, and externally as a penta-helix collaboration (government, industry, media, academy, professionals and other technical and social communities).
- Improving the quality of conferences in Indonesia, IEEE Indonesia Section organizes free Workshop on Conference Management regularly, provides new options of LOA types, i.e. LOA Schema A, B1, and B2 (https://ieee.id/organizing-a-conference/), and Self-Quality-Conference-Assessment Tool. In addition to encourage all organizers to collaborate with Chapters and Student Branch. These raise number of conferences activities by 50% in 2021 and the quality of those conferences will be expected increase.
- IEEE Indonesia Section increase membership from East of Indonesia and 3T (frontiers, outermost, and least developed regions), and provide them access for high quality information. Thus we are focusing several activities conducted in East of Indonesia and 3T regions.
C.6 Problems anticipated and suggestions for solutions, if any

- IEEE Indonesia Section needs to increase its membership from private universities, east part of Indonesia, students, industries, and government. Therefore the Section suggests the solutions to keep the good established relationship, to continue good programs, and to do the recommendations below.
  1. Conducting expertise exchange programs for IEEE members through online-based courses and training.
  2. Organizing events that accommodate the interests of each component of IEEE members in Indonesia, including those working outside Java and in Eastern Indonesia, in the industrial and government sectors, new graduates starting their careers, as well as undergraduate and postgraduate students.
  3. Bridging student and lecturer internship programs in various industries and Indonesian research institutions.
  4. Exchange information on government, industry and university research programs.
  5. Facilitate the study and dissemination of government regulations related to technology and its applications.
  6. Encouraging the growth of IEEE standards-based Professional Certification Bodies and actively involved in implementing standards and socializing the latest standards.
  7. Encourage and support the government in creating regulations that foster a research ecosystem that supports the growth of technology-based products in Indonesia.
  8. Increasing the support and facilitate the participation of IEEE Indonesia's Student Branch in IEEE contests and events.
  9. Increasing the number of new IEEE Indonesia members from many backgrounds who interest with the technology relate to the IEEE.
 10. Creating new and innovative activities.
 11. Provide financial flexibility in the implementation of the IEEE Conference and other IEEE activities in Indonesia.

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

- IEEE Indonesia Section will run all 2021 good programs that bring good impacts.
- IEEE Indonesia Section will carry out the 2021 MOU agreement in the form of activities which involves many OUs.
- IEEE Indonesia Section will produce some innovative strategic, work program, and activities.
- IEEE Indonesia Section will continue to support all activities that already conducted in previous years, particularly Student, YP, WIE, Industry Relations, SIGHT, Humanitarian, and Educational Activities.
- IEEE Indonesia Section supports in forming new sub-Sections, Chapter and new Student Branch in Indonesia and keep monitoring their vitality.
- IEEE Indonesia Section will develop and maintain a good relationship with industry, government, and other communities. We will increase to conduct several activities in collaboration with industry, government, and communities in term of both their quality and quantity.

D.2 Goals and Future Plans

- IEEE Indonesia Section’s vision is ‘Realizing IEEE Indonesia as a leading science & technology and professional organization in Indonesia’.
- Therefore its mission to the future goals is ‘to improve the relevance, quality, and quantity of human resources related to higher education and industry through increasing skills and professionalism in science & technology and innovation so as to increase national and humanitarian competitiveness’.
- IEEE Indonesia Section’s future plans are:
  - To maximize the benefits to members.
  - To improve the quality of technical activities in Indonesia.
  - To boost the membership of Indonesia Section in all area in Indonesia.
  - To enhance the relationship and collaboration with all societies nationally and globally.
  - More programs to be conducted to rural areas, so they can feel the benefit of IEEE.
  - More humanitarian activities with involvement of SB and members all over Indonesia.
D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals
- Collaborations with key and leading industries in Indonesia and globally.
- Collaboration with Government to gain access to the nation development.
- Penta-helix collaborations.
- Collaborations with important media (mainstream media and online media)
- Collaborations with local government, villages head, and public figures in term of applications of technology for humanity.

D.4 Business Plan for Sustainable Growth and Financial Stability
- Strengthen relationships and collaborations internally between section, chapters, affinity groups, student branch, and externally as a penta-helix collaboration (government, industry, media, academy, professionals and other technical and social communities).
- IEEE Indonesia Section keep improving the quality of biannual WISHY Congress to encourage further involvement and collaboration between WIE, entrepreneurship, industry, SB, humanitarian community, and YP.
- Improving the quality of conferences in Indonesia, IEEE Indonesia Section organizes Workshop on Conference Management regularly, provides new options of LOA types, i.e. LOA Schema A, B1, and B2 (https://ieee.id/organizing-a-conference/), and Self-Quality-Conference-Assessment Tool. In addition to encourage all organizers to collaborate with Chapters and Student Branch. These raise number of conferences activities by 50% in 2021 and the quality of those conferences will be expected increase.
- Committee of IEEE Indonesia Section includes government, industry, academic, entrepreneurs, students, young and professionals, gender representatives, and others. We keep conducting several workshops that involved them to bridge the gap between IEEE and them.
- IEEE Indonesia Section needs to increase membership from East of Indonesia and 3T (frontiers, outermost, and least developed regions), and provide them access for high quality information. Thus we start focusing several activities conducted in East of Indonesia and 3T regions.
- IEEE Indonesia Section promotes, encourages, and supports in forming new Chapters and new Student Branches in Indonesia and keep monitoring the vitality of these Chapters and SB.
- To enhance the benefits to members by providing high quality technical information through workshop, technical seminar, courses, DLP, and conferences.
- To ensure the sustainable growth and financial stability of Section, Chapters, Affinity Groups, and Student Branches. Then to maintain the student members after graduation and assist them in leveraging into Professional Member. Finally to leveraging members into Senior Members to increase the membership retention. IEEE Indonesia Section also promotes Senior Members and invites them to the major IEEE conferences/technical events.
- To provide new payment system for membership fee https://ieee.id/membership/payment-via-ieee-is/ that assists all members and new members who don’t have credit card or others electronic payment account. They can do payment in local currency.
- Promoting membership benefit to increase member.
- Maintaining the group payment procedure to join or renew membership.
- Improving conference sponsorship agreement and procedures.
- In conclusions, all of those strategies have shown effectively by increasing of members, student branches, senior members, conferences, activities such as the increase number of SB who join IEEE5EXtreme competition, and the increase of cooperation and collaboration with other partners.
Appendix of Indonesia Section Report

APPENDIX

B.3 List of Professional and Continuing Education Activities

1. Pengenalan Divisi Keilmuan Departemen Ilmu Komputer IPB University, was on Feb 27, 2021, attended by IEEE member: 11 and non IEEE: 105. The event to introduce research area, lab, and student community which was organized by STB11476 - Bogor Agricultural University.


3. Sharing Overleaf IEEE Template University to discuss the use of overleaf in article templates according to the IEEE template provisions. Date of event was Oct 17, 2021. Speakers were Regina, University of Raharja; Marволia, University of Raharja, by STB99974 - University of Raharja. Nontechnical > Pre-University Activities. IEEE Attended: 19 and Guests Attended: 40.

4. The PROVE (Professional Development Workshop, Build Your Early Career) was held on Feb 20, 2021, with 127 participants.

5. IEEE Day celebration on Oct 16, 2021 that was followed by IEEE Technical Society Talk on Leveraging Technology for A Better Tomorrow and IEEE Student Branch Pitching Contest. These events were joined by 212 participants.

6. The IEEE Indonesia Section Young Professionals Outreach and SICOVID-19. Training is aimed to provide online meet up activity for YP members in Indonesia, to promote IEEE to the general public, in this case, local communities in South and West Jakarta cities, and introduced SICOVID-19 to local Covid-19 Task Forces. Speaker: Indra Riyanto, Universitas Budi Luhur. It was organized by YP00059 - Indonesia Section Affinity Group, and part of a Professional > Professional (Other) event, on June 10 2021, with IEEE Attended: 7  and Guests Attended: 67.

7. IEEEssential: "IEEE Student Essential Education and Development Training Day", was on 03 July 2021, and a collaboration event between IEEE SB UNDIP STB16221 and IEEE SB UGM STB09561 to share about IEEE membership, training, self and career development through professionals. Speakers were Dr. Ir. Gamantyo Hendrantoro, Ph.D.; Tiara Yania Ifani Lakita; Eng. Sunu Wibrarma, S.T., M.Eng.; Syauqie Candra Buana, S.T. (New Product Introduction Coordinator, Caterpillar Inc); Muhammad Fakhruzaman S.T (Ex Acquisition Engineer, Schlumberger London and OP Observer OP, Shearwater GeoServices, Gatwick, UK). Administrative > Officer Training . IEEE Attended: 25 and Guests Attended: 120.

8. SATFEST 4.0. Theme: Basic Introduction to Remote Sensing in Satellite, was by SBC06341 - Telkom University,GRS29  and Satcommradar Laboratorium Nano Satelit Universitas Telkom, on 03 July 2021. It was a technical event with speakers: Dra. Maryani Hartuti, M.Sc of LAPAN; Muhammad Purwa Manggala of Telkom Indonesia, with IEEE Attended: 0  and Guests: 134.

9. Natural Language Processing, Branch of Artificial Intelligence Science is an IEEE STB99076 SB Pakuan University event and collaborate with ComStrac-DSC Universitas Pakuan. Continuing Education. Speakers: Prof. Madya Dr. Noor Azah Binti Samsudin, Universiti Tun Hussein Onn Malaysia; Dr. Eng. Ayu Purwarianti, S.T., M.T., Head of AI Center ITB; Ismail Fahmi, PhD is a founder Empirit. It was on 14 July 2021 with IEEE Attended: 6 and Guests Attended: 806.


11. IEEE Indonesia Section, held workshop on IEEE Financial Sponsorship for International Conference for all conference organizers on March 13, 2021 with 75 attendees.

12. IEEE Indonesia Section pre-launch of IEEE Innovation Nation Program on Oct 19, 2021, with 103 attendees. The event included an explanation of IEEE Innovation Nation Program.

13. A Professional event, training on 5G Radio Network and Parameter Planning, was organized by Communications Society Chapter COM19, on 7 Nov 2020. This training was held in collaboration with Fastconn and Techbros with 21 attendees (1 IEEE member and 20 non – IEEE), that was part of the 5G Training for Covid 19 series.

14. National Symposium for Information Technology Students (SIMPATI) on bioinformatics, cloud computing, computational intelligence, computer vision, data mining, information retrieval, DSP, HCI, image processing, and networks was attended by 150 (2 IEEE members and 148 non IEEE). This
15. Training of 5G E2E - 5G Edge RAN Architecture and Security was conducted by Communications Society Chapter COM19 (CH10273) in collaboration with Fastconn and Techbros, on Nov 13, 2020. This professional event was attended by 21 (IEEE member: 1 and non IEEE: 20).

16. Training of 5Gc Introduction, Architecture and Call Flow was conducted by Communications Society Chapter COM19 (CH10273), in collaboration with Fastconn and Techbros, on Nov 14, 2020. This professional event was attended by 21 (IEEE member: 1 and non IEEE: 20).

17. Training of 5G Radio: 5G Features Technical Overview: from Basic to Advanced Features was conducted by Communications Society Chapter COM19 (CH10273) in collaboration with Fastconn and Techbros, on Nov 14, 2020. This professional event was attended by 21 (IEEE member: 1 and non IEEE: 20).

18. Training of 5G End to End Concepts was conducted by Communications Society Chapter COM19 (CH10273) in collaboration with Fastconn and Techbros, on Jan 22, 2021. This professional event was attended by 21 (IEEE member: 1 and non IEEE: 20).

19. Training on IoT Device Technician Competency, in collaboration between Train4best and IEEE Communication Society CH10273, on Nov 26 – 28, 2020, was a professional event with 22 attendees (1 IEEE member and 21 non IEEE).

20. INTRODUCTORY LECTURE ON ELECTRIC CIRCUIT ANALYSIS - PROMOTING ELECTRIC CIRCUIT ANALYSIS THROUGH SIMPLIFIED SPECIFIC APPLICATIONS for undergraduate students was on Nov 17, 2020 in collaboration between the CH10358 CASS CAS04 Chapter, the CH10357 EMB18 Chapter and IEEE ITENAS Student Branch, with the speaker was Prof. Dr. Soegijardjo Soegijoko, with 30 attendees (4 IEEE members, and 26 non IEEE).

21. IEEE SEACAS VIRTUAL HACKATHON was on Jan 18 2021, organized by CH10358 Chapter, CAS04 CH10357 Chapter, EMB18 in collaboration with the IEEE CASS Vietnam and Malaysia. The objectives are to provide preliminary information of "IEEE SEACAS VIRTUAL HACKATHON", and to encourage Students to join it. IEEE Attended: 5 and non IEEE : 12

22. SEACAS Hackathon for ideas to cope with covid-19 using IoT related technologies was on Feb 04 – 6 2021, by CH10358 Indonesia Section Chapter, CAS04, with IEEE attended: 65.

23. Open Broadcaster Software Workshop, a Technical event, was on 10 Feb 2021, by R00059 - Indonesia Section, with 5 attendees.

24. IEEE INDONESIA SIT & CAS CHAPTERS – “WEBINAR SERIES FOR UNDERGRADUATE STUDENTS”, was a Technical event, on 17 Feb 2021, by CH10770 Chapter, SIT30, CH10358 Chapter, CAS04, with IEEE Attended: 2 and non IEEE: 55.

25. “WEBINAR SERIES FOR UNDERGRADUATE STUDENTS - Electric Circuit Laws”, was on 03 March 2021, a technical event, by CH10358 Chapter,CAS04; CH10770 Chapter, SIT30; CH10357 Chapter,EMB18, with IEEE member: 1 and non IEEE: 35.

26. IEEE EMBS DAY Webinar Series was by CH10357 Chapter, EMB18 ; CH10770 Chapter, SIT30, a Technical event, on 05 March 2021, with IEEE member: 3 and non IEEE: 18.

27. Webinar Menulis Jurnal Internasional, was on 06 March 2021, by STB99382 - Nusa Putra University, a Technical Event, with IEEE member: 50 and non IEEE: 130.

28. “WEBINAR SERIES FOR UNDERGRADUATE STUDENTS - Applications of Circuit Laws”, was on 10 March 2021, by CH10357 Chapter,EMB18 - CH10770 Chapter, SIT30 - CH10358 - Chapter,CAS04 , a Technical event, with IEEE Attended: 1 and Guests Attended: 30.

29. Webinar Peluang dan Tantangan Pemanfaatan Energi Baru Terbarukan Indonesia, was on 12 March 2021, by STB99382 - Nusa Putra University, a Technical event, with IEEE Attended: 40 and Guests Attended: 140. The Speakers are Handrea B Tambunan and Marina Ariyasa.

30. Nanosat Design Workshop 1st Sessions was on March 19, 2021, by SBC06341 - Telkom University,GRS29, a Technical event. The event was to provide students the know-how for designing the small satellite with speakers were Dr. Heru Wiyanto; Dr. Ing. Wahyudi Hasbi; and Dr. Arifin Nugroho, with IEEE Attended: 10 and Guests Attended: 306.

31. NANO-SATELLITE DESIGN WORKSHOP 2nd session. Webinars being organized by CH10629 GRS29/AES10 J CHAPTER (INDONESIA SECTION) and SBC GRSS Telkom University, was on March 20, 2021, with speaker were Anggoro Widyawan, Ph.D, and Prof. Josaphat Tetuka Sri Sumantyo, Ph.D, was a Technical event, with IEEE Attended: 70 and Guests Attended: 120.

32. Webinar Data Visualization, Managing Citation with Mendeley and Endnote, was by CH10880 Chapter,CIS11, a Technical event, with speakers: Dr. Dini Oktarina Dwi Handayani, ST, M.Sc. (Taylor’s University, KL, Malaysia); Haris Al Qodri Maarif, ST, M.Sc. (International Islamic University Malaysia, KL, Malaysia), with IEEE Attended: 53 and Guests Attended: 84
33. Webinar Computational Intelligence, Blockchain, and Cyber Security, was by Computational Intelligence Society CH10880 CIS11 and School of Computer Science, Nusa Putra University. The Speakers were Prof. Teddy Mantoro, Ph.D., SMIEEE; Umar Aditiawarman, Ph.D (Komite Nasional Ekonomi dan Keuangan Syariah KNEKS, Jakarta – Indonesia); Deshinta Arrova Dewi, Ph.D (INTI International University, Nilai – Malaysia); on 03 April 2021, a Technical event with IEEE Attended: 47 and Guests Attended: 79.

34. Webinar Towards the Heart of the Machine was by CH10880 Chapter, CIS11 and School of Computer Science, Nusa Putra University, on 11 April 2021, a Technical event, with Speakers: Dr. Rahmadya Trias Handayanto (Universitas Islam 45, Indonesia); Dr. Dini Oktarina Dwi Handayani (Taylor’s University, Malaysia), with IEEE Attended: 49 and Guests Attended: 89.

35. Online WORKSHOP on Ground Penetrating Radar (GPR) and Its Applications was the two-day webinar organized jointly by CH10629 GRS29/AES10 J Chapter, Microwave and Satellite Lab of the Telkom-University, and Student Branch GRSS Chapter of Telkom-University, sponsored by Radar and Telecommunications Indonesia, and Telkom-University, a Technical event, with speakers: Dr. A.A.Pramudita, Mr Sumirah, Mr. Lea Sumargana, BPPT, Dr. Agustan BPPT, with IEEE Attended: 45 and Guests Attended: 105.

36. Webinar Artificial Intelligence and Cyber Security, was on July 17, 2021, Speaker: Prof. Teddy Mantoro. PhD, SMIEEE, by CH10880 Chapter, CIS11, with IEEE Attended: 65 and Guests: 106.

37. Webinar Open House Program Magister Computer Science - Nusa Putra University with Impactner was on July 21, 2021, Speakers: Prof Teddy Mantoro. CH10880 Chapter, CIS11 a Technical event, with IEEE Attended: 58 and Guests Attended: 60.

38. Innovation Accelerations using Open Source Core as a Service in 5G Technology, was on July 23, 2021, by CH10273 Chapter, COM19, a Professional > Professional (Other), with IEEE Attended: 1 and Guests Attended: 17.

39. e-Workshop on Narrow Band Satellite-IoT Standard was a two day workshop with Speakers: Dr. Anggoro Widiawan, TelkomSat; Teguh Prasetya, MSc, of Alita Co.; Dr. Arifin Nugroho TELKOM-University; Jinhui Zhao, of HEAD Aerospace Corp.; Eddy Setiawan, MTAS, Chair, IICF; by CH10629 Joint Chapter, GRS29/AES10, a Technical event, with IEEE Attended: 50 and Guests: 200.

40. IEEE WEBINAR ON ELECTRIC CIRCUITS for Undergraduate Students, was by CH10770 Chapter, ST30; CH10358 Chapter, CAS04, a Technical event, on 27 July 2021, with IEEE Attended: 4 and Guests Attended: 15.

41. IEEE LECTURE ON ELECTRIC CIRCUITS for Undergraduate Students was on July 28, 2021, by CH10770 Chapter, ST30; and CH10357 Chapter, EMB18, a Technical event, with IEEE Attended: 4 and Guests Attended: 9.

42. e-Workshop on Artificial Intelligence (AI): Applications in Remote Sensing, a Technical event, on 31 Jul 2021 was organized jointly by GRS29/AES10 Joint Chapter of IS, GRSS Gujarat, India, Chapter, Universitas Islam Indonesia (UII), Yogyakarta, Indonesia, and Student Chapter of IEEE, UII, Yogyakarta. Speakers were Prof. Josaphat Tetuko Sumyang - Chiba University, Japan; Mr. Rohit Singh, ESRI, India; Prof. Kazuo Ouchi, Institute of Industrial Science, University of Tokyo, Japan; Galdita Aruba Chulafak, M.Sc., LAPAN Remote Sensing Applications Center; Dr. Agustan, BPPT, MAPIN. IEEE Attended: 43 and Guests Attended: 129.

43. Webinar Artificial Intelligence about AI, cyber security, mobile computing and application, was on 07 Aug 2021, with speakers: Prof. Teddy Mantoro, SMIEEE; Deshinta Arrova Dewi, Ph.D; Dr. Dini Oktarina Dwi Handayani, by CH10880 – IS Chapter, CIS11, a Technical event with IEEE Attended: 40 and Guests Attended: 60.

44. Webinar Artificial Intelligence and Application in Society 5.0 Era, was on 14 Aug 2021, by CH10880 – IS Chapter, CIS11, with speakers: Dini Oktarina, PhD.; Deshinta Arrova Dewi, PhD.; Dr. Dini Oktarina Dwi Handayani, by CH10880 – IS Chapter, CIS11, a Technical event with IEEE Attended: 74 and Guests Attended: 135.

45. CH10273 – IS Chapter, COM19 held online webinar in collaboration with TIP Telkom University on topic “Strengthening Security and Intelligence in Post-Quantum Era”, was a Professional > Professional (Other) event, on Aug 27 – 28, 2021, with IEEE Attended: 1 and Guests: 17.


47. National Webinar: Welcome 5G and Industry 5.0 Era about mobile application trend, AI theory and software for business development, was on 28 Aug 2021, with speakers: Prof. Teddy Mantoro, Ph.D., SMIEEE; Deshinta Arrova Dewi, PhD; Dr. Haris Al Qodri Maarif; Candra Mecca Sufyana, M.T.

48. WEBINAR TECHNOLOGY: IMPLEMENTATION OF AI AND CYBER-SECURITY about the AI theory and application in Cyber Security and Geospatial, was on Aug 28, 2021, with speakers: Prof. Dr. Teddy Mantoro, SMIEEE; Dr. Rahmadya Trias Handayanto; Dini Oktariana Dwi Handayani, PhD, by CH10880 – IS Chapter.CIS11, a Technical event, with IEEE Attended: 52 and Guests: 79.

49. IEEE INDONESIA SPECIAL LECTURE FOR UNDERGRADUATE STUDENTS: “INTRODUCTION TO DC CIRCUITS ANALYSIS, was on Sep 29, 2021, by CH10358 IS Chapter, CAS04; CH10770 IS Chapter, SIT30; CH10357 IS Chapter, EMB18, a Technical event with speaker Soegijardjo Soegijoko, and IEEE Attended: 8 and Guests Attended: 20.

The IEEE Day Special Lecture for Undergraduate Students for the First and Second Year Undergraduate Students in Electrical, Electronics, and Biomedical Engineering, was on 06 Oct 2021. Speaker was Soegijardjo Soegijoko, by CH10357 IS Chapter, EMB18; CH10770 IS Chapter, SIT30; CH10358 IS Chapter.CAS04, a Technical event with IEEE Attended: 2 and Guests: 18.

50. Workshop on Artificial Intelligence (AI) Applications in Remote Sensing, on 31/07/2021, by STB17751 - Universitas Islam Indonesia

51. Kuliah Umum Pertanian Cerdas dan Agro-maritim Presisi, on 24/08/2021, by STB11476 - Bogor Agricultural University

52. Webinar EE#5: Introduction to Fiber Optic Technology (DWDM and OTN), on 28/08/2021, by STB17751 - Universitas Islam Indonesia

53. IEEElevate: Kickstart Your Career Journey, on 05/09/2021, by STB16221 - Diponegoro University


55. Known PLTS with Blockchain, on 02/10/2021, by STB99974 - University of Raharja

56. Comparative Study, on 03/10/2021, by STB17751 - Universitas Islam Indonesia

57. Let’s Find Out about Tips on Building a Startup, on 03/10/2021, by STB99076 - Pakuan University

58. Webinar Sensor Ferroelektik Serta Strategi Perlindungan dan Permohonan Paten : Bogor Agricultural University, on 07/10/2021, by STB11476 - Bogor Agricultural University

59. Education Project Universitas Islam Indonesia, on 07/10/2021, by STB17751 - Universitas Islam Indonesia

60. The 3 Annual Engineering and Vocational and Education Conference (AEVEC) 2021, 16/10/2021, by CH10781 - Indonesia Section Chapter

61. Webinar: Computer Engineer Beretika Sebagai Keunggulan Kompetitif by Bina Nusantara University, on 21/10/2021, by STB11381 - Bina Nusantara University

62. Export of Russian education: problems and prospects of regional universities, on 22/10/2021, by CH10784 - Indonesia Section Chapter

63. Ideafest Main Event: Digital Twins : Bina Nusantara University, on 27/10/2021, by STB11381 - Bina Nusantara University

64. Digital Transformation Coordination, on 30/10/2021, by CH10784- Indonesia Section Chapter

65. Collaborative AI to Accelerate Economic Recovery, on 02/11/2021, by CH10784 - Indonesia Section.

66. Artificial Intelligence: Transforming Physics of Banking Services, on 04/11/2021, by CH10784 - Indonesia Section Chapter.

67. Leadership Class#1: The Importance of Leadership, on 13/11/2021, by STB17751 - Universitas Islam Indonesia

68. Webinar: Telco Sharing Session “Kepoin 5G di Jepang” was on 13/11/2021, by CH10273 - Indonesia Section Chapter

69. Leadership Class#2: Self Leadership, on 20/11/2021, by STB17751 - Universitas Islam Indonesia

70. Leadership Class#3: Psychology of Leadership, on 27/11/2021, by STB17751 - Universitas Islam Indonesia

71. Implementasi Pemrograman Embedded System Menggunakan Python, on 29/11/2021, by STB99076 - Pakuan University

72. Leadership Class#4: Lead with Empathy, on 04/12/2021, by STB17751 - Universitas Islam Indonesia

73. Leadership Class#5: Leadership about Influence, on 11/12/2021, by STB17751 - Universitas Islam Indonesia

74. Leadership Class#6: Growth Mindset and Learning Mentality of a Leader, on 18/12/2021, by STB17751 - Universitas Islam Indonesia

75. Online webinar, collaboration ComSoc Indonesia & NetCo on Topic: Cloud dan 5G : on 26/12/2021, by CH10273 - Indonesia Section Chapter

76. IEEE IS Annual Meeting, on 18 Dec 2021, Agenda: 1)Panel Discussion: Theme: Digital solutions to recover together, recover stronger; 2) IEEE IS Report; 3) Organizational Unit Report; 4) IEEE


83. Virtual Discussion on DRM Digital Radio Technology Implementation, on 23 January 2021, by Government Relations & Industry Relations, Indonesia Section. Brief description of activity: The serial online discussions was held to explore technical, commercial, and other aspects of the implementation of digital radio technology based on Digital Radio Mondiale (DRM), related to RPM The use of frequency spectrum in medium frequency bands and very high frequency band II radio frequency bands. The discussion result was aggregated in the forms of technical and non-technical feedbacks, that was sent to Ministry of Communication and Information Technology of the Republic of Indonesia on January 25, 2021. It is arranged as the improvement from current regulation regarding radio frequency masterplan in AM and MF radio broadcasting, as well as the masterplan in radio frequency for FM broadcasting. This event was published in online media: https://bitnesia.com/ieee-indonesia-geler-diskusi-virtual-bahas-implementasi-teknologi-radio-digital-drm.html with Participants : 12 IEEE members; 1 non member.

82. Book Review: Innovation on Cellular Telecommunication Technologies for Indonesia, on 23 November 2021, 14.00-16.00 (GMT+7), by Government Relations & Industry Relations, Indonesia Section. Brief description of activity: This event was held to review “Innovation on Cellular Telecommunication Technologies for Indonesia”. This book was written by most of IEEE Indonesia members. This book discusses the history of the development of telecommunication technology in Indonesia from 1G to 5G, innovation products from new technologies, and proposing regulations for the implementation of telecommunications, ICT skillset for the future and business potential of innovations products. **Participants: 400.** This event was published in online media : https://balitbangsdm.kominfo.go.id/berita-acara-bedah-buku-potensi-inovasi-telekomunikasi-seluler-untuk-indonesia-46-1002, https://www.youtube.com/watch?v=TcgW3xygfIw


84. The 14th International Conference on Telecommunication Systems, Services, and Applications (TSSA) 2020, as an a technical event, was organized by CH10358 - Circuits and Systems Society Chapter and the Telecommunication Engineering Research Group, School of EE and Informatics, ITB, that was on Nov 04 - 05, 2020, with IEEE member: 20 and Non IEEE: 40).

85. IEEE International Conference on Communications, Network, and Satellite (COMNETSAT) is an annual conference in the field of Communications, Network and Satellite Systems on Dec 17 2020 to Dec 18 2020 that was sponsored by IEEE Communication Society Chapter (CH10273). This professional event was joined by 78 (EEE member: 7 and non IEEE: 80).

86. The 2020 IEEE Asia-Pacific Conference on Geoscience, Electronics, and Remote Sensing Technology (AGERS-2020) was organized by GRS29/AES10 Joint Chapter, Indonesia Section of the IEEE, in collaboration with a) the The Assessment and Application of Technology Agency of the Republic of Indonesia (BPPT), and b) Indonesian Remote Sensing Professional Society (MAPIN), on Dec 07 - 08, 2020, with 400 attendees (IEEE member: 10 and non IEEE: 390).

87. The 10th 2021 IEEE International Conference on Communications, Network, and Satellite (Comnetsat), was on July 17-18, 2021, by CH10273 Chapter,COM19, a Professional > Professional (Other) event, with IEEE Attended: 65 and Guests Attended: 0.

88. The 2021 IEEE International Conference on Industry 4.0, Artificial Intelligence, and Communications Technology (IAICT), was by CH10273 Chapter,COM19; SBC06341A - Telkom University,COM19, a
Technical event, with speakers: Danilo Pelusi Department of Communication Sciences, University of Teramo, Italy; Prof. Dr. Indra Jaya of Dept. Marine Science & Technology, IPB University, Indonesia, on July 27 – 28, 2021, with IEEE Attended: 20 and Guests Attended: 62.

89. The 2-days AGERS-2021 e-Conference was organized by IS Chapter GRS29/AES10 (CH 10629) in collaboration with the National Research and Innovation Agency (BRIN) and supported by Terra Drone Indonesia, on Sep 29 – 30, 2021, a Technical event, with IEEE Attended: 34 and Guests Attended: 134.

90. Universitas Riau International Conference on Education-Technology-2021 (URICET-2021), on 14/10/2021, by CH10781 - Indonesia Section Chapter

91. The International Biomedical Instrumentation and Technology Conference (IBITeC 2021), 20/10/2021, by CH10273 - Indonesia Section Chapter

92. International Conference on Recent Advancement in Science and Technology ICoRAST 2021, on 21/10/2021, by CH10784 - Indonesia Section Chapter

93. The International Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA 2021), on 27/10/2021, by CH10273 - Indonesia Section Chapter,COM19

94. The International Conference on Artificial Intelligence and Big Data Analytics, on 27/10/2021, by CH10273 - Indonesia Section.

95. The 2021 International Student Conference on Electrical and Computer Engineering, on 28/10/2021, by STB17451 - Udayana University

96. 2021 IEEE International Conference on Aerospace, Electronics, and Remote-Sensing Technology (ICARES2021) - the fifth : Indonesia Section Joint Chapter, GRS29/AES10, on 03/11/2021, by CH10629 - Indonesia Section Joint Chapter, GRS29/AES10

97. The 3rd International Symposium on Materials and Electrical Engineering, on 10/11/2022, by CH10781 - Indonesia Section Chapter

98. The 2021 IEEE International Conference on Internet of Things and Intelligence System (IoTaIS 2021), on 23/11/2021, by CH10273 - Indonesia Section Chapter, SBC06341A - Telkom University

99. The 2021 IEEE 5th Symposium on Future Telecommunication Technologies (SOFTT), on 06/12/2021, by CH10273 - Indonesia Section Chapter

100. Distinguished Lecture, Dr. Manoj Saxena (Deen Dayal Upadhyaya College University of Delhi) with title "Modeling and Simulation of Robust Ultrasensitive, Tunnel Field Effect Transistor Design for Biosensing Applications" was held by Electron Devices Society ED15 (CH10788) chapter on Jan 21, 2021, with 161 attendees (IEEE member: 25  and non IEEE: 136).

101. Guest Lecture: Compiling Your Calculations to Run on Quantum Hardware, This is an introductory lecture for quantum technology, was on 28 Jan 2021, by CH10358 - Indonesia Section Chapter,CAS04, with attendance of IEEE: 10 and non IEEE : 40.

102. Guest lecture Digital System and Beyond, with speaker Dr. Namal Arosha S. Senanayake Mudiyansealage, Universiti Brunei Darussalam, was on 17 Mar 2021, by STB11381 - Bina Nusantara University, a Professional (Other) event, with IEEE Attended: 12 and Guests: 23.

103. Distinguished Lecture on Data Mining and Machine Learning for Analysis of Network Traffic with speaker Ljiljana Trajkovic of Simon Fraser University, Canada, was on 26 Apr 2021, by CH10358 Chapter,CAS04, a Technical event, with IEEE Attended: 36 and Guests Attended: 147

104. Distinguished Lecturer Program on “Channel Modelling for Evaluation of Communication Systems”, with speaker Prof. Gamantyo Hendrantoro, was on Sep 4, 2021, by CH10273 – IS Chapter, COM19; R00059 – IS, a Technical event with IEEE Attended: 35 and Guests: 47.

105. IEEE Virtual Distinguished Lecturer (VDL) Talk: "Connecting Space Assets to the Internet: Challenges and Solutions" : New York Section Chapter, on 29/10/2021, in collaboration with many chapters, i.e. CH01082 - New York Section Chapter, CH05171 - Fort Worth Section Chapter, CH10273 - Indonesia Section Chapter, and many more.