

IEEE Hong Kong Section 2023 Report

PART A - SECTION SUMMARY

A.1 Executive Summary –

- 1. IEEE HK Section AGM Meeting Jan 20, 2024, with over 80 IEEE members in HK joined this AGM meeting, with Prof. Kenneth Wong, our advisor.
- 2. IEEE HK Section ExCom Meeting: In 2023, five Section ExCom meetings were scheduled for the chapter officers / representatives. The five ExCom meetings below:
- Feb 4, 2023 22 members
- Apr 15, 2023 20 members
- Jun 24, 2023 22 members
- Sept 23, 2023 20 members
- Dec 16, 2023 20 members
- 3. IEEE HK Section attended SC2023 Enabling Leaders to build a sustainable Future in Ottawa, Canada in 11-13 August 2023 (by Dr. Paulina Chan).
- 4. IEEE HK Section supported a STEM competition in the summer.
- 5. IEEE HK Section supported events with Local National Organizations, including Hong Kong Productivity Council, and Hong Kong Baptist University.
- 6. IEEE Reliability Chapter is formed. Inauguration of the Chapter was held on 27 September, 2023.
- 7. Six Newly Elevated Fellow Class of 2023 are from IEEE HK Section.

IEEE HK Section ExCom Meeting has 8 Section Advisors, 24 chapters, 3 affinity, 6 Student Branches.

Advisor: Nim CheungAdvisor: Wan-Chi SiuAdvisor: Paul CheungAdvisor: K.M. LukAdvisor: P.C. ChingAdvisor: Vincent Lau

Advisor: Paulina Chan Advisor: Kenneth Wong

Total number of Chapters, WIE/YP/LM AG, SB.

Total number of Chapters, w1E/11/EM AO, Sb.			
AP/MTT Chapter	EP Chapter	VT Chapter	
CAS/COM Chapter	GRS Chapter	IES Chapter	
CT/OE Chapter	IE/PE/IA Chapter	LMAG Affinity	
CEDA Chapter	IT Chapter	WIE Affinity	
CI Chapter	MAG Chapter	YPAG Affinity	
COMP Chapter	PHO Chapter	CityU SB	
CS/RA Chapter	PSE Chapter	CUHK SB	
E Chapter	RS Chapter	HKBU SB	
ED/SSC Chapter	SMC Chapter	HKU SB	

EMB Chapter	SP Chapter	HKUST SB
EMC Chapter	TEM Chapter	HKMU SB

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities (Dec 2023)

- Total number of active members in the past year is 3,368 with the following breakdown:
- 3.368 Total
- 32 Life Fellows
- 102 Fellows
- 20 Life Senior Members
- 352 Senior Members
- 68 Life Members
- 1.804 Members
- 684 Graduate Members

B.2 Chapter Activities

- 1. The AP/MTT Chapter has organized the following events:
 - a. organized two events: conducting technical research in Shenzhen and Guangzhou, collaborating with the industry players there; and organized three seminars. They are going to host a postgraduate conference in the Greater bay area, collaborating with three Universities in China.
 - b. organized two seminars in Hong Kong. The chapter also co-organized a 5G/6G workshop with its Shenzhen chapter.
- 2. The CEDA Chapter organized the following events:
 - a. will continue running EDA Hackathon, attracting good PhD candidates.
 - b. co-organized EDAthon 2023 with Cadence, Hisilicon, HKUST, and Empyrean at HKUST on August 25, 2023.
- 3. The CIS Chapter organized the following events:
 - a. had an internal gathering to discuss further on the distinguished lectures or activities in coming year.
 - b. kept running some workshops, and planned to have some joint activities with Thailand Chapter in coming year.
 - c. kept running some workshops, and organized the annual FYP/PG Competition in this summer.
 - d. organized the annual FYP/PG Competition in HKU during the summer. The chapter plans to continue organizing distinguished lectures regularly.
- 4. The CT/OES Chapter organized the following events:
 - a. will continue work hard to recruit student members (based on secondary schools). The chapter will run a conference based on the standard S2668, a RB competition with Canadian international school as a technical advisor, ROV competition as a technical sponsor in China, young engineering conference in November, etc.

- b. will continue work hard to recruit student members (based on secondary schools). Competitions for secondary schools will be held in May and November respectively. Keep looking for collaborations with other chapters, and secondary schools to run workshop etc.
- c. is still working hard in Junior engineering, guiding youngsters to engineering/IEEE. They have underwater event on 15 Oct. Judge competition in Guangzhou soon. They shifted competitions to real world challenges using the PBL approach than STEM approach. CTOES is looking for funding in supporting activities in the chapter.
- 5. The CAS/COM Chapter organized the following events:
 - a. worked on ICAPCC, and will come up with an endorsement from the Beijing section to have a conference in August 2023.
 - b. organized the 2023 IEEE International Conference on Signal Processing, Communications and Computing in Zhengzhou in November 2023.
 - c. organized the 2023 IEEE International Conference on Signal Processing, Communications and Computing in Zhengzhou in November 2023. Additionally, they hosted a distinguished lecture program titled "Low Power Wirless Biomedical Signal Acquisition" by Prof Milin Zhang in HKUST on November 5, 2023.
- 6. The Computer Chapter organized the following events:
 - a. co-sponsored a banquet and can invite people of interested to attend; they are actively working on a list of conferences or workshops (e.g. metaverse workshop); they are arranging an AGM in March.
- 7. The CS/RA Chapter organized the following events:
- 8. The ED/SSC chapter organized the following events:
 - a. will run its flagship international symposium on power semiconductor devices and ICs in Hong Kong in May 2023. Expected to have around 400 people. The chapter will organize IEEE student symposium on electronic devices and solid-state circuits for ug and pg students in coming May. And Try to bring one other flagship conference to Hong Kong in 2025.
 - b. ran five physical distinguished lectures. At least two chapter meetings have been done to come up with new activities.
 - c. organized two events: 23 International symposium in semi-conductor and IC. More than 500 researchers attended the symposium and a student symposium. Also, with collaboration with EDSS soon.
 - d. organized one seminar and is currently applying to host an international/flagship conference in Hong Kong.
- 9. The Education chapter organized the following events:
 - a. completed an AGM last month.
 - b. engaged in TALE 2023 in Oakland. Dr. Gary Wong is appointed as a new steering committee member. Work closely with R10 via Dr. Leon Lei, EAC chair.

- c. engaged in the Event on R10 Education Activities Committee (Ray, Leon) with the CI Society High School Outreach Subcommittee.
- d. engaged in the Event on R10 Interactive Training Session on Climate Change
 Searching two students in HK Section to join the training on Jul 29 and Jul 30
- e. participated in the TALE conference and applied a funding to incubate the future organization of TALE in R10.
- 10. The EMC Chapter organized the EMC distinguished lecture series.
- 11. The EP chapter organized the following events:
 - a. planned to have a conference hosted in HKUST in April. ASMPT will have a conference about smart automotive and the chapter will be participating. The chapter is having an engineering development plan, exploring on how to engage engineers to IEEE.
- 12. The GRSS Chapter organized the following events:
 - a. had a workshop in the last year end. In this year, the chapter planned to write book series, and have annual chapter gathering. Planned to have a symposium/conference having around thousand people to Hong Kong.
 - b. had an ExCom meeting for activity planning: identify new activities and people in charge.
- 13. The IT Chapter organized the following events:
 - a. engaged in activities such as workshop in TENCON. Prof. Raymond Yeung from the Chapter received prestige award. The chapter is going to organize/collaborate with IT chapters from China and Taiwan, organize summer school in this year, educating the young people. It targets to recruit new members in coming year.
 - b. engaged in a distinguished lecture from US in June. Reimbursement is expected.
 - c. organized 2023 International Workshop on Learning and Information Theory (WOLIT'23) on July 3-5 (http://idi-wolit.com/wolit23/)
 - d. organized 2023 Croucher Summer Course in Information Theory on Aug. 14-18 (https://cscit.hk/)
 - e. organized two talks in the summer.
 - f. organized a machine learning and information theory workshop with the IT Chapter Guangzhou, Tsinghua university and the Chinese University of Hong Kong in July 2023. Additionally, they held a Croucher summer course in August 2023 and hosted three talks with international scholars. In the coming year, the chapter plans to organize a workshop with Guangzhou and Taipei chapters.
- 14. The MAG Chapter organized the following events:
 - completed two distinguished lectures. In this year, the chapter will host two
 distinguished lectures/workshops and host some workshops for junior high
 school students.
 - b. hosted a distinguished lecture in person and is going to host two events: one lecture in one emerging area in the magnetic community in this summer, and a workshop in the winter.

- c. hosted a talk and will be organizing a workshop in October.
- 15. The PHO Chapter organized the following events:
 - a. hosted distinguished lectures and PG conference. Planning for industrial visits in April or May this year.
 - b. had a PHO-related company visit.
 - c. had seminar and PG conference in year end.
 - d. hosted a seminar titled "6G, Metaverse, and Generative AI: From Convergence to Emergence" by Prof. Martin Maier at HKU on October 12, 2023.
- 16. The RS Chapter organized the following events:
 - a. served as the supporting organization for the public seminars titled "Strategies for Sustaining Systems Reliability" and "Reliability & Safety Risks in Electronic Products & Systems" on August 10 and 23, respectively. The chapter will have its chapter inauguration cum HKSTP x CAiRS Collaboration Signing Agreement Ceremony on September 27, 2023.
- 17. The SP Chapter organized the following events:
 - a. arranged two talks.
- 18. The VT/IES Chapter organized the following events:
 - a. hosted a distinguished lecture by a Taiwan professor and a workshop with IES/VTS in the summer. Chunhua will represent VTS HK to give a distinguished lecture in mainland.
 - b. hosted a distinguished lecture at CityU and will host one more with a speaker from Toronto in October. IES Hong Kong and Guangzhou will co-organize a seminar in October and seek collaborations with local universities in Hong Kong.

B.5 Affinity Group Activities

- 1. A 2-day IEEE Workshop on Deep Learning by LMAG will be held on 2 to 4 April, 2023 and the support of members are appreciated. Thanks Prof Siu!
- 2. HKU Chapter visited HKSTP in September.
- 3. HKU Chapter organized a FinTech talk in Cyberport and a visit to science park.
- 4. CityU Chapter is going to recruite more student members. Now, having ten members and do more promotion and hopefully to grow the member number to 50. The chapter would like to connect with other student chapters in Hong Kong.
- 5. CityU Chapter organized ChatGPT workshop and a top girl will give a talk in near future too.
- 6. CityU Chapter is electing the chair. The chapter will have a physical office in CityU. R10 SAC encouraged students to submit application to awards and/or join the contests in R10.
- 7. CityU Student Branch is officially on list under SDS in CityU. CityU teams will participate in the IEEEXtreme Programming Competition and encourage other

- student chapters to join. A seminar titled "6G, Metaverse, and Generative AI: From Convergence to Emergence" will be conducted at CityU.
- 8. WIE will collaborate with region and headquarter offices more frequent. The chapter encouraged female members from other chapters to join WIE. WIE leadership conference will be held in San Diageo in June.
- 9. WIE Chapter collaborated with Imperial women and CMI in social media deliverables. The chapter is looking for a new chair in the year end.
- 10. WIE Chapter participated in panel discussions at ICC Malaysia and TENCON 2023 Chiang Mai, respectively. WIE will also support the first TryEngineering Summer Institute to be held in Hong Kong in collaboration with EDB. Additionally, Paulina will chair a panel discussion at the Innovation Summit (with Prof. Martin Maier) cohosted with HKTDC and HKETA on October 13, 2023. The chapter is currently looking for an affiliate chair in this year end.

B.6 Awards & Recognition Activities

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

- Newsletter (name and number of issues in the year)
 - ♦ No
- Home Page of the Section (give the URL and how often it is updated)
 - ♦ https://r10.ieee.org/hk/ (regular update)
- Other means of contacts with Section members including social media
 - ♦ Facebook

B.8 Industry Relations

- Membership growth and retention
 - ♦ Yes, more industrial partners joined us as members.
- Activities for/with industrial members
 - ♦ Yes, some chapters with collaboration with industrial members.

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
 - ♦ No
- SIGHT Activities
 - ♦ No

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)
- For the Family oriented event, IEEE HK Section co-organized the family coding learning activities with local national partners and industry partners such as HK STEM Education Alliance and Hour of Code Hong Kong.

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved
 - No
- Funding secured from the IEEE and external sources including sponsorships
 - No

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

- Nature of relationship and details of any formal agreement signed
 - No
- Details of joint activities
 - No
- Benefit to IEEE members (for example discounts, access to technical information etc.)
 - No
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)
 - No

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections
 - No
- Joint activities with any other Section
 - Individual chapters with collaborations with other IEEE Sections, as mentioned in Section B.2.

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

- Support extended for organising technical, educational and professional activities
 - Refer to Section B.2.
- Joint activities for membership development
 - No
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section
 - No

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

No

PART D - GOALS AND PLANS

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

No

D.2 Goals and Future Plans

5 Foci in 2023/24

- Develop Student Branch Young members in HK Section
- Recruit, Retain, Reinstate ("3 Rs") + Member Engagement
- Develop Outstanding Fellow Talk in HK Section
- Maintain Center of Excellence in technologies
- Collaborate with external parties
- D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

No

D.4 Business Plan for Sustainable Growth and Financial Stability.