

Iran Section

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IEEE Iran Section Report

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Section Vitality

The 2022 Election of the Iran Section Executive Committee

The 2022 election of the Iran Section Executive Committee began with the publication of "Call for Nominations" in September 2022. The election was started on December 2 and closed on December 28, 2022. In total, 22% of the members, who could vote, participated in this election.

In the meeting of the Executive Committee held on Wednesday, January 4, 2023, Prof. Mahmoud Fotuhi-Firuzabad, the Chairman of the Nominations and Appointments Committee (N&A) of the IEEE Iran-Section, announced the election results as follows:

- For the positions of Chair and Vice Chair:
- 1. Prof. Hossein Askarian Abyaneh 49.4%
- 2. Prof. Vahid Ahmadi 38.3%
- 3. Dr. Alireza Yazdizadeh 12.1%
- For the position of Secretary:
- 1. Dr. Hadi Aliakbarian 46.9%
- 2. Dr. Vahid Nayeri 39.5%
- 3. Dr. Alireza Dolatabady 13.5%

Since there was only one candidate for the position of the treasurer, with the approval of the N&A Committee, Dr. Mohammad Reza Yousefi was appointed as the Treasurer.

Based on the outcome of the election, the Iran Section Executive Committee has the following members in the period of 2023-2024:

Chair: Prof. Hossein Askarian Abyaneh

Vice-Chair: Prof. Vahid Ahmadi

Secretary: Dr. Hadi Aliakbarian

Treasurer: Dr. Mohammad Reza Yousefi

The members of the Nominations and Appointments Committee (N&A) of IEEE Iran-Section are as follows:

- Prof. Reza Faraji-Dana
- Prof. Mahmoud Fotuhi-Firuzabad
- Prof. Hamid Soltanian-Zadeh
- Prof. Jalil Agha Rashed Mohasel
- Prof. Mahmoud Shahabadi
- Prof. Ahmadreza Sharafat
- Prof. Hadi Moradi

Students

Currently, we have 58 Student Branches (SB). Some of the members of SBs are members of the Students Activities Committee (SAC) and all 15 committees of the Section which helps the section body to be more dynamic. We have conducted the 13th IEEE Iran Section Awards Ceremony. Also, SAC was the responsible of conducting two main programs as Open Data Hackathon 2022 and inauguration meeting of the Board of Directors in 2022 and introduction of the Board of Directors in 2023. We have started a program to develop both Soft and Professional Skills for students named IEEE Iran Section Progress Event.

Activities we have done:

- Metaverse over Wireless Networks: Challenges and Opportunities Webinar
- IEEE Iran Section and Scientific Development of Iran Scientific Talk
- Soft and Hard Data Fusion for Intelligent Decision-Making Based on An Artificial Intelligence Approach Scientific Talk
- Deep Learning and its Applications Scientific Talk
- Application of Artificial Intelligence in Graph Mining and Complex Network Analysis Scientific Talk



- Planning and starting Progress Event
- Git for Daily Works Workshop
- Fundamentals of CI/CD with Git Workshop
- IoT and Connected Cars Webinar
- How to Have a Good Interview Webinar
- The Art of Writing a Research Paper Webinar
- Artificial Intelligence: Applications and Challenges with An Enterprize Approach Webinar
- Training and Simulation of Graphene-Based Periodic Absorbent Structures in Comsol Engineering Software Workshop
- Project Management Frameworks: Scrum
- Training and Simulation of Nanoantenna Design in COMSOL Engineering Software Workshop
- The active presence of student committee students in Chapters, fifteen Committees and other parts of Iran Section
- Formation of Student Team Up
- Creation of international activities group
- Checking and helping to organize more than 50 events of student branches (such as Khajeh Nasir University of Technology, Hamadan University, Shahrekord University and so on).
- Cooperation in holding the Data Challenge event
- Revision of regulations for student awards
- Guidelines for supporting student membership to develop membership
- Revision of regulations of the Top Counselor Award
- Active participation in IEEEXtreme programming competitions
- Holding a meeting with the board of directors of all branches and counselors of the branches
- Compilation of regulations for the review of student conferences
- Active participation in District 8 meetings
- Participate and help organize the ITU Smart City and Internet of Things event
- Cooperation with the student scientific organization
- Support and design of the 12th virtual award ceremony of IEEE Iran Section
- Support and design of the 20th Annual Meeting with the Executive Committee of IEEE Iran Section and Student Branches' Counselors
- Support and planning of the final meeting of Round Table for sustainable supply of electric energy, peak load 1401 (2022) and after
- Support and design of Key Concepts in Blockchain Technology webinar
- Support and design introduction of hyper ledger fabric network webinar
- Support and design of the call for elections of the Control Chapter of the Iran Section
- Support and plan for the call for elections of the Electromagnetism and Photonics Chapter of Iran Section
- Support and design of the call for elections of the Computer Society of Iran Section
- Support and design of the call for the election of the Power Electricity Chapter of Iran Section
- Support and design how to write a research paper webinar
- Support and design of How to Become a Senior Member of IEEE webinar
- Support and design for the development of solutions based on the Internet of Things in smart islands webinar
- Support and design the Future of the Internet of Things webinar
- Support and design of introducing IEEE and the Iran section webinar of the membership development committee
- Support and design How to Become a Senior Member webinar of the IEEE Promotion Committee



Affinity Groups

Young Professional Committee

Mission

- Inspiring and equipping youth to be proactive and responsible, become more successful professionals, stronger leaders, and more conscientious citizens,
- Provide professional development opportunities for Young Professionals,
- Create the building blocks for lifelong and diverse professional networks: while school ties end at graduation, support from IEEE lasts through your entire career.

Vision

- Facilitate the successful transition of IEEE student members through young professionals to senior members, as future leaders of the techno-economic ecosystem.
- Planned Activities
- Support student members by bridging the transition from young professional to senior membership.
- Provide students and young professionals with career services/advice via talks/seminars/webinars and job fairs/demonstrations.
- Provide students and young professionals with soft skills education via talks/seminars/webinars.
- Provide students and young professionals with technical/professional training via talks/seminars/webinars.
- Enable better networking and engagement between senior and younger members.
- Create a society-wide mentoring community based on volunteering.

Activities done by YP

Design and development of Upside-Down World Contest for the Iran Section Annual Meeting in Nov. 2022 Planning of a Webinar on "Soft Skills and Its Importance in An Engineers Professional Development

Industrial Relations Committee

Industry Mentorship

- Job Site is a place for those who are in need of mentorship, have any questions and any help for career design and opportunities. We are trying to connect expert people (with high experience from well-known companies/trade unions such as the Iranian Telecommunication Industries Syndicate) to individuals which are in need of consult.
- IEEE Iran Section IRC is formed of top, well known and highly experienced industry individuals as well as active students/volunteers who are available for helping and consulting section student members in their relevant fields

Engagements with Companies

Our active industry partnerships are well-known companies/trade unions in the country which have been mentioned already in our reports however they are listed as follows:

- Iranian Telecommunication Industries Syndicate
- Paya Communication Industries
- Mobinnet Telecommunication Company
- Nian Electronic Co.
- Faraz Co.
- Basir Technology Company
- R & D Development Company (Teta) Azmoon Keyfiat Co.
- Karen Antennas Technology Co.
- Crouse Manufacturing Industries
- Pooyandegan Rah Saadat Co.
- Avid Net Technology
- https://psp.ir/power
- Faravid Co.



• Monenco Iran Consulting Engineers

Entrepreneurship

Participation of industries to request the need for training in relevant standards Participation of industries to hold the Smart Data Challenge

Internship Opportunities and Student Oriented Activities

IEEE Iran Section elects the chair of the Industrial Relations Committee every two years. Eng. Hossein Riazi is in charge of the 20212-2022 term, and he is currently an Ambassador for Industry in AFI

- We have 30 internship opportunities this year, some of them are now active as full-time employees in top companies in the country
- Our Communication with students is through Iran Section website so that every content related to is industry will be stored and published is available in the Industrial Relations Committee page. Also, we have lunched a place for job opportunities as Job Site, <u>https://jobsite.ieee.org.ir/</u>. Job Site is for those who are seeking for job opportunities and also companies which have a job offer/opportunity (employer and employee)
- Support for Amirkabir University of Technology CoOp project
- The Industrial Relations Committee page is active and available on the Iran Section website. All content related to the industry will be stored and published through our web page. Also, we refer to the published content via all section/student branches and social media to make the content available to students and the public faster and easier.

Activities done (or contributed) by IEEE Iran Section IRC

- Participation of IRC Chair Eng. Hossein Riazi as the head of the Industrial Relation and Exhibitions committee at the 6th International Conference on Millimeter-Wave and Terahertz Technologies (MMWaTT) is organized by K.N. Toosi University of Technology
- Git for Daily Works Workshop
- Fundamentals of CI/CD with Git Workshop
- IoT and Connected Cars Webinar
- How to Have a Good Interview Webinar
- Project Management Frameworks: Scrum
- Committee report in the Q2 AFI meeting 2022
- Sending committee report to AFI
- Liaise with other committees and affiliated groups to increase interactions
- Encourage and promote industrial people and active organizations to cooperate voluntarily with the IEEE Iran Section

Awards and Recognition Committee

IEEE Iran Section Awards Committee is one of the 17 committees of the Iran Section, which is responsible for managing the awards presented by the IEEE Iran Section. Also, the selection of the candidates for the awards of the IEEE Iran section is done by this committee, and the regulations of the awards are compiled and revised by the awards committee.

This section includes examples of awards presented by the IEEE Iran Section to recognize IEEE members, non-members, firms, individual IEEE members, etc.

Lifetime Teaching Award and Lifetime Research Award

The IEEE Iran section "Research Award" & "Educational and Teaching Award" is presented to Individuals to recognize their outstanding contributions to the field of Electrical, Electronics, and Computer engineering. The main criteria and basis of judgment are:

- Seminal education of contribution,
- Outstanding research achievements
- The practical impact on technological development,
- Breadth and depth of theoretical,



- Industrial and technological contributions.

Prof. Hakkak Award

Innovative participation of the late Professor Mohammad Hakkak in improving the quality of telecommunication engineering research in Iranian universities and research centers, in the field of microwave antennas, wave propagation, microwave circuits, mobile telecommunications, satellite communications, and space technology, Prompted IEEE Iran Section to approve an award entitled the Research Award of Professor Mohammad Hakkak. This award is given to those researchers in the country who have worked extensively in scientific research in the fields of microwave antennas, wave propagation, microwave circuits, mobile communications, satellite communications and space technology.

Prof. Jabehdar Award

The enduring role of Professor Parviz Jabehdar Maralani in stabilizing and improving the quality of electrical engineering education in the country's universities led the IEEE Iran Section to approve an award called the Educational Award of Professor Parviz Jabehdar Maralani. This award is given to those faculty members of the country's universities who like him, have considered the sustainable development of electrical engineering through extensive scientific efforts over the years.

Prof. Fakhraei Award

The innovative participation of the late Professor Seyed Mehdi Fakhraei in improving the quality of digital engineering education and research in Iranian universities and research centers, in the field of microelectronics, digital systems, integrated circuits, and the realization of the telecommunication systems hardware, led to the IEEE Iran Section to award to approve an award called the Research Award of Professor Seyed Mehdi Fakhraei .This award is given to those researchers in the country who have worked with extensive scientific efforts in the fields of microelectronics, digital systems, integrated circuits, and realization of the telecommunication systems hardware.

Prof. Caro Lucas Award

The innovative participation of late Professor Caro Lucas in improving the quality of artificial intelligence and robotics education and research in Iranian universities and research centers, in the field of control and intelligent systems, led IEEE Iran Section to approve an award entitled the Caro Lucas Research Award. This award is given to those researchers in the country who have worked in such research fields with extensive scientific efforts. Based on the evaluation and recognition of the jury, this award is given annually to a researcher in the field of artificial intelligence and robotics with the most outstanding performance.

Industry Awards

• Industry Veteran Engineer Award

Veteran industrial engineer is one of the most important assets of the country that can play a role in line with the goals of the country's development programs by relying on the huge capital of specialized manpower. This facilitates the transition from a resource-based economy to a knowledge-based and resilient economy. In this way, his/her valuable experiences will be provided to the young generation of the country. To this end, every year, the IEEE Iran Section Industrial Relations Committee awards the Veteran Engineer of the Year in the field of electrical and computer engineering in recognition of valuable and effective efforts.

• Top Entrepreneurs Award

"Entrepreneurship" is a process through which the entrepreneur, while identifying opportunities through innovation and risk acceptance, creates new value in the economic or social spheres and plays an important role in the growth and development of the country due to the changes and transformations that he/she creates in conventional practices. In fact, entrepreneurship is one of the most important strategies that can help the country's development goals in line with the policies of the country's development programs, relying on the huge capital of specialized manpower and the transition from a resource-based economy to a knowledge-based economy. To this end, every year, the IEEE Iran Section Industrial Relations Committee awards the Best Entrepreneur Award in the field of electrical and computer engineering industry in recognition of the valuable and effective efforts of the entrepreneur.

Young Investigator Award

The IEEE Iran section Young Investigator Award is given to honor young Iranian scientists under the age of 40, who have made significant contributions (Research and Educational) to the field of Electrical, Electronics, and Computer engineering



in Iran. This award is given annually and considers the activities of the nominee during the past 5 years before the award nomination.

Women in Engineering Award

In order to honor prominent women in universities, research centers, the field of industry, and entrepreneurship, eligible individuals will be nominated by prominent professors or specialists in these fields in accordance with the conditions for receiving the annual Women in Engineering Award.

Student Activities Committee Awards

In order to encourage undergraduate, postgraduate, and doctoral graduates, counselors, and student branches, and to honor their efforts in promoting and excelling the scientific position of the country, the IEEE Iran Section annually awards prizes to these groups as the following:

Outstanding Student Branch Counselor

Best Ph.D. Thesis AwardOutstanding Ph.D. ThesisBest M.Sc. Thesis AwardOutstanding M.Sc. ThesisBest B.Sc. Thesis AwardOutstanding B.Sc. ThesisBest Student Branch AwardStudent Branch Excellence Award

WiE

Mission & Vision

- Expanding the WIE network by collaborating with similar scientific and industrial groups and associations such as the Association of Women Entrepreneurs, Iranian Women in Photonics, Women in AI, Academy of Science Women in Engineering, etc. in order to hold webinars, workshops, internships, etc.
- Expanding WIE network representatives in various universities, research institutes and industries among academics and student branches as well as professional engineers.
- Participating actively in national conferences and workshops to promote networking among WIE members and introduce WIE objectives, and hold empowering workshops and side meetings by inviting scholars and experts from academic, industry and research institutes.
- Plan for webinars, virtual and online workshops and presentations by inviting a broad spectrum of experts in education and industry.
- Expanding international communications to interact and collaborate with other WIE committees worldwide, especially in Region 8, to exchange experiences and to promote the potential and expertise of Iranian women in related international events.
- Identifying and disseminating information related to the WIE members' achievements via the website of the IEEE Iranian branch and Region 8 Newsletter.
- Indicating the methodology of executing WIE's objectives in universities and industry by defining and classifying the essential activities, such as: Launching academic/technical/job advisors among researchers, engineers, scientists, industry experts, academics and senior students to mentor young students.
- Interacting and collaborating with other Iran Section IEEE Committees. The 118th IEEE Region 8 Hybrid http://april-2022.ieeer8.org/ Committee Meeting Warsaw, Poland, 1-3 April 20224
- Setting up the WIE membership site or via other social networks and WIE members database in order to facilitate future interactions and communications with them.
- Examining how to promote the effective and competent presence of women in the area of technology and engineering science, especially in Electrical and Computer Engineering.
- Encouraging and promoting young students (especially WIE members) to achieve leadership positions in the industry by arranging and organizing enrichment events and workshops.



Activities done by WiE

- The WiE Committee of Iran Section and the Women's Unit of the Ministry of ICT are planning joint events through MoU, which the first joint event is in the field of artificial intelligence.
- Holding regular meetings of the Women in Engineering Committee
- Round table meeting with entrepreneurs
- Launching podcasts of leading women
- Webinar about data science
- Fake news detection webinar
- Familiarization with Fazoor Webinar
- TBD Webinars
- Machine vision workshop
- Deep learning workshop

Standard Committee

The two-year plan of the Standards Committee is as follows:

- Identifying and promoting and training at least three IEEE standard titles related to the computer sector in Iranian industries
- Identifying and promoting and training at least three IEEE standard titles related to the power sector in Iran's industries
- Identification and promotion and training of at least three IEEE standard titles related to the control sector in Iranian industries
- Identifying and promoting and training at least three IEEE standard titles related to the electronics sector in Iranian industries
- Identification and promotion and training of at least three IEEE standard titles related to telecommunications and information theory in Iranian industries
- Identification and promotion and training of at least three IEEE standard titles related to photonics and electromagnetics in Iranian industries

Activities done by Standard Committee

- Identifying and introducing IEEE standards with high priority related to the power sector required in industries
- Identification and introduction of IEEE standards with high priority related to the electronics sector required in industries
- Identification and introduction of high priority IEEE standards related to the control sector required in industries
- Identification and introduction of high priority IEEE standards related to photonics and electromagnetics required in industries
- Identification and introduction of high priority IEEE standards related to photonics and electromagnetics required in industries
- Identifying and introducing IEEE standards that are essential in the field of ICT
- Preparation and arrangement and exchange of a Memorandum of Understanding entitled "Memorandum of Development and Promotion of IEEE Standards related to the field of activities of Tawanir Company" between Tawanir, Niro Research Institute and the IEEE Standards Development Committee
- Receiving Tavanir's requirements for training and developing standards and guidelines related to the electricity industry and planning for their training in line with the exchanged memorandum.
- Preparing and arranging a memorandum of understanding with the first partner company regarding the development and promotion of IEEE standards and other fields in the IEEE Iran Section

Activities done by Educational Activities Committee (EAC)

 Training and Simulation of Graphene-Based Periodic Absorbent Structures in Comsol Engineering Software Workshop



- Training and Simulation of Nanoantenna Design in COMSOL Engineering Software Workshop
- Using the cooperation of faculty colleagues and experts
- Providing advice to event organizers
- Formation of 5 cryptocurrency groups, soft skills, online training, online laboratory, smart networks
- Holding cryptocurrency webinars at three levels: elementary, intermediate and advanced
- Conducting soft skills courses that can be implemented in absentia
- Conducting ethics training courses in science and technology
- Holidays with Blockchain Workshop
- The Role of Machine Learning In Modern Satellite Communications Webinar
- Providing instructions and solutions for conducting laboratories online (virtual)
- Holding webinars on smart networks
- Holding artificial intelligence webinars
- Holding entrepreneurship webinars
- Article writing and article mining in databases and citations
- Holding appropriate workshops in cooperation with other reputable scientific associations
- Holding workshops with the cooperation of Women's Affairs of Iran Telecommunication Research Center
- Holding suitable events for high schools, industry and universities with the cooperation of experts and student branches
- Holding training workshops in the post-corona era
- Cooperation with other committees and groups of the department, especially the professional activities committee
- Checking and approving the events proposed to use the logo of the Iran Section
- Evaluation and issuance of digital certificates in the Iran Section

Activities done by Conferences Committee

- Carrying out basic changes and improvements on the page of the conference committee of the Iran section
- Changing the user interface on the conferences web page in order to improve the clarity of the procedures for registering and inserting conference information
- Implementation of the flowchart of conference registration procedures along with the required links
- Improving and updating the frequently used links page in order to clear ambiguities
- Activating the integrated internal communication system to improve and speed up the conference registration process
- Setting up an electronic payment system
- Update of approved conferences on the site of the IEEE Iran section
- Holding a meeting with the board of directors and representatives of Technical Chapters of Iran Section
- Providing advice to event organizers

Iran Section is the sponsor of many conferences during each year as well as some of the section members help to organize events. the list of conferences is as follows:

- pedstc2021.tabrizu.ac.ir/
- iccia2020.tabrizu.ac.ir
- iranwebconf.ir
- imtec.irib.ir
- http://iot2021.ui.ac.ir/en
- http://www.epdc25.ir
- csicc2021.kntu.ac.ir/en
- icelet2021.mehralborz.ac.ir
- iranwec.com



- iscisc2021.ui.ac.ir
- https://iceeconf.ir/
- ipria2021.ismvipconf.ir
- www.iwcit.com
- iccke2021.um.ac.ir
- sgc2021.tabrizu.ac.ir
- icrom.ir
- aimc52.uk.ac.ir
- icbme.ir
- https://www.ncaea2021.um.ac.ir/Home
- http://www.icspis.ir/page/index/1/en
- http://iktconference.ir/2021
- https://segap.ir/en
- http://iicm2021.modares.ac.ir/index.php?slct_pg_id=10&sid=1&slc_lang=en
- mvip2022.ismvipconf.ir
- http://pedstc2022.sbu.ac.ir/
- icredg2022.sadjad.ac.ir
- wasowc2022.tabrizu.ac.ir
- http://cfis2022.bam.ac.ir/en
- https://iccia2022.ir/Home
- http://iranwebconf.ir/?lang=en
- http://iahpc.ir
- http://ipaps.ir/index_e.aspx
- http://csi.org.ir/csicc2022/en/index.html
- https://conf.uok.ac.ir/icelet2022/Default.aspx?Lang=En

Chapters

Currently, we have 8 active Technical Chapters as follows:

- 1) Communications and Information Theory Joint Chapter
- 2) Control Systems Joint Chapter
- 3) Electromagnetics and Photonics Joint Chapter
- 4) Power Joint Chapter
- 5) Electronics Joint Chapter
- 6) Computer Society
- 7) Computer Society
- 8) Electronics Chapter

Activities done by Technical Chapters

- Quantum Communications Networks: Opportunities and Challenges Scientific Talk
- Call for Control Chapter Elections
- Call for Electromagnetic and Photonic Chapter Elections
- Call for Computer Society Elections
- Call for Power Chapter Elections
- Call for Electronics Chapter Elections



Activities since the last report

- Obtaining 2021 Region 8 Outstanding Medium Section Award at the Cairo IEEE R8 Committee meeting for delivering excellent services to its members.
- Developing the section strategic plan. This plan is one of its kind for clarifying the section roadmap by providing duties to all section. Our action plan is include of:
 - Guide and nurture innovation towards industry through Extensive Collaboration and Knowledge Sharing.
 - o Provide opportunities for Career and Professional Development
 - o Extension of International Science, Technology and Innovation Collaboration
 - Supporting lifelong learning and becoming a trusted Refrence for Educational Services and Resources
 - o Enhancing Public engineering and technology and pursing standards for their Ptactical application
- Memorandum of Understanding (MoU) between IEEE Iran Section and ICT Research Institute which will be described more in below topics.
- Open Data Hackathon 2022. The detail of this event can be found in below.
- We have started a project for defining the section Timeline which provides all section events during a year. The project helps all units to plan more precisely as well as members, students and branches and the outside community become aware of all section events.
- Holding elections for the new term based on the new statute
- Presenting the progress report of the committees, chapters and affinity groups related to the Iran Section
- Preparation of a Manual for holding workshops
- Informing the Iran section awards in social media and following up on sending the documents of the participants
- Compilation of IEEE and Iran Section Introduction booklet
- Evaluation of the candidates for the Iran section awards

Planned activities

- Developing section strategic plan
- Promotion of activities in international cooperation (participation in R8 committees)
- Invite prominent international researchers to introduce their program and activities in person or online
- Holding regional and international events in Iran
- Efforts to develop and promote science and educational centers in the country
- Promote and develop industry relations to increase the growth of technology at the national level
- Cooperation with scientific research institutions and scientific associations
- Develop and promote the level of student activities
- Increasing the number of student branches in the country to expand the student network
- Introducing and promoting national awards in the field of education, research, student branches, and volunteer activities
- Increase IEEE membership
- Preparation of Iran Section strategic plan, action plan, and roadmap
- Development of Technical Chapters' activities to expand the network of faculty and student members in the country

How Region 8 can be of help to your Section, members, and activities

As we mentioned in our previous reports, we are facing the following issues:

- Our members especially students cannot effort it which causes a decrease in membership statistics. R8 can help us to convince headquarters to set the membership fee based on our local currency.
- Although most programs like Member-Get-a-Member (MGM), Future 50, etc. are not available for our members so they cannot take benefit from such a program which causes loss of motivation in the members. We believe that if some programs become available for our members it will motivate our students and members to interact more with IEEE and its benefits



Executive Team

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The 13th IEEE Iran Section Awards Ceremony

The 13th award ceremony of the IEEE Iran-Section was held on Wednesday, January 4, 2023 at 9:30, in the Shahid Atabaki hall of the Information and Communication Technology (ICT) Research Institute, with the presence of more than 150 professors, advisors of student branches and students. The ceremony was simultaneously being broadcast live on the Skyroom online platform with more than 150 participants.

Mr. Mohammad Ghaderzadeh, the host of the ceremony, welcomed to all prestigious guests and started the session officially. Then **Dr. Seyed Mohammad Razavizadeh**, chair of the ICT Research Institute, gave his speech and welcomed the guests. **Dr. Vahid Ahmadi and Dr. Hossein Askarian Abyaneh** presented a memorial plaque to Dr. Razavizadeh in recognition of the valuable efforts and cooperation of the research institute with the IEEE Iran-Section.

Then, **Dr. Vahid Ahmadi**, the Chair of the IEEE Iran Section, while welcomed the guests, introduced the board of director (BoD) of the IEEE Iran Section and presented the report of that the Section situation.

It was time to introduce IEEE Iran Section board and a video clip to give specific information about each one of BoD was played. Then, **Prof. Jawad Faiz**, the IEEE Iran Section Awards and Recognition Committee Chair, started to give information about nominees of the **2022** awards.

List of awards, giver, and recipients of them are:

- Lifetime Teaching Award: Prof. Ahmad Reza Sharafat, from Tarbiat Modares University
- Lifetime Research Award: Prof. Mohsen Parsa Moghaddam, from Tarbiat Modares University
- Prof. Hakkak Award: Prof. Masoumeh Nasiri Kenari, from Sharif University of Technology
- Prof. Jabehdar Award: Prof. Saeed Bagheri Shouraki, from Sharif University of Technology
- Prof. Caro Lucas Award: Prof. Mohammad Bagher Menhaj, from Amirkabir University of Technology
- Prof. Fakhraei Award: Dr. Ali Medi, from Sharif University of Technology
- Industry Veteran Engineer Award: Dr. Ali Fotowat Ahmady, from Sharif University of Technology
- **Top Entrepreneurs Award:** Eng. Jamshid Bordbar, from Afraz Azma Co.
- Women in Engineering Award: Prof. Mahrokh Ghani Shayesteh, form University of Urmia
- Young Researcher Award: Dr. Hemin Golpira, from University of Kurdistan
- Best Ph.D. Thesis Award: Dr. Ashkan Zandi, from University of Tehran
- Outstanding Ph.D. Thesis Award: Jointly Dr. Mojtaba Moradi, from K.N. Toosi University of Technology, Dr. Mohammadreza Daneshvar from University of Tabriz, and Dr. Hoda Zamani, from Islamic Azad University, Najaf Abad Branch
- Best M.Sc. Thesis Award: Eng. Reza Behkam, from Amirkabir University of Technology
- Outstanding M.Sc. Thesis Award: Eng. Soheil Hakakzadeh, from Sharif University of Technology
- **Best B.Sc. Thesis Award:** Eng. Seyed Hamed Khatounabadi and Eng. Seyed Mohammad Hosseini from Sharif University of Technology
- **Outstanding B.Sc. Thesis Award:** Jointly Eng. Ali Teymouri from Islamic Azad University Najaf Abad Branch and Eng. Farhad Khodadadi Sharifabad from Iran University of Science and Technology
- Best Student Branch Award: K.N. Toosi University of Technology, Counselor: Prof. Nosrat Granpayeh and Chair: Ehsan Soleimani



• **Outstanding Student Branch Award:** Jointly, Ferdowsi University of Mashhad, University of Tehran, and University of Kurdistan.

Memorandum of Understanding (MoU) between IEEE Iran Section and ICT Research Institute

The IEEE Iran-Section, along with its aims, and in order to increase international cooperation and the optimal use of scientific and research capacities, preparation and signed a Memorandum of Understanding (MoU) with ICT Research Institute. This MoU emphasizes on the cooperation of both parts in the fields of education and research in order to increase the country's international communication and also to support student activities.

Dr. Seyed Mohammad Razavizadeh, the head of the ICT Research Institute, in the signing ceremony of this MoU, considered this MoU important and emphasized on the acceleration of the implementation of it. He expressed "Considering the international position of the IEEE Iran-section, this MoU will help the ICT Research Institute to increase our international relations. Also, IEEE Iran-section can benefit from all the facilities available in the ICT Research Institute for the implementation of its projects."

Prof. Vahid Ahmadi, the Chairman of the IEEE Iran-Section, explained the activities of the Iran Section and the way that can help the ICT Research Institute. He expressed "The IEEE Iran-Section has prominent scientist members and this has caused this section to have a high capacity at the international society. Currently, there are lots of potential capacities in the international common fields of the ICT Research Institute and the IEEE Iran-Section, which can be turned into reality with this MoU. I hope that by creating a joint committee, it will be possible to implement these great capacities and took important steps towards the development of the country."

The IEEE Iran-Section with history of more than half a century, with 17 committees, 6 societies, 58 student branches, consultants and industry experts, appreciates that in recent years has done scientific activities with the support of the ICT Research Institute.

Open Data Hackathon 2022

The Open Data Hackathon 2022 event was held by the IEEE Iran-Section in cooperation with the ICT Research Institute in two days (November 19 and 20, 2022), and at the end, the best teams were given exquisite prizes.

The purpose of this event was to establish the culture of freeing data in the country along with sustainable development, justice, and transparency. The topics of this challenge were health, image processing, money and banking, energy, and exploitation of open data.

The noteworthy point in this event was the introduction of the best projects with business value to the Information and Communication Technology Park, as well as the central bank regulatory sandbox of Iran to obtain special support.

In this event, there were specialized panels, including the "Open Data; Opportunities and Challenges of Service Development" held with the presence of Engineer Reza Bagheri Asl, Dr. Vahid Shah-Mansouri, Dr. Jafar Mortezavian, Dr. Ali Moini, Dr. Neda Abdolvand, and Dr. Alireza Yari.



Pictures



Picture 1. Photo of the Executive Committee , January 4, 2023 - announce the election results



Picture 2. 2021 Region 8 Outstanding Medium Section Award at the Cairo IEEE R8 Committee meeting





(a)





(b)





(c)





استاد احمدرضا شرافت استاد، گروه مهندسی برق - مخابرات دانشکده مهندسی برق و کامپیوتر، دانشگاه تربیت مدرس

📮 تحصيلات و سوابق علمي

- * کارشناسی مهندسی برق، دانشگاه صنعتی شریف (۱۳۵۳)
- الشناسی ارشد و دکتری مهندسی برق، دانشگاه استنفورد کالیفورنیا (۱۳۵۴و ۱۳۵۹)
 - IEEE عضو ارشد مادام العمر
 - رئیس بخش ایران IEEE (سال ۲۰۱۷ و ۲۰۱۸)
 - الله عضو مدعو فرهنگستان علوم ایران (از سال ۱۳۹۱ تا کنون)
 - النيس اتاق فكر هوش مصنوعي فرهنگستان علوم ايران (از سال ۱۴۰۰ تا كنون)
- نایب رئیس، گروه مشاوره توسعه ارتباطات (TDAG)، اتحادیه بین المللی مخابرات (ITU) (۱۴۰۰ تا ۱۴۰۴)
 - ۱۲۰۱) ITU نایب رئیس، کنفرانس جهانی توسعه ارتباطات، ITU (۱۴۰۱)
 - انتشار و ارائه بیش از ۲۵۰ مقاله معتبر در مجلات و کنفرانس های بین المللی
 - 🛠 تالیف ۴ کتاب در زمینه مخابرات

📩 🛠 ثبت ١٢ اختراع



(d)







Lifetime Researc Award

استاد محسن پارسا مقدم استاد، گروه مهندسی برق - قدرت دانشکده مهندسی برق و کامپیوتر، دانشگاه تربیت مدرس

تحصيلات و سوابق علمي

- الشناسي مهندسي برق، دانشگاه صنعتي شريف (١٣٥٨)
- * کارشناسی ارشد مهندسی برق، دانشگاه صنعتی تویوهاشی، ژاپن (۱۳۶۴)
- دكترى مهندسى برق، دانشگاه توهوكو، ژاپن (۱۳۶۷)
- انتشار و ارائه بیش از ۲۵۰ مقاله پژوهشی در مجلات و کنفرانس های معتبر بین المللی
 - الريستي بيش از ۳۰ رساله دكتري 🛠
 - مدایت بیش از ۸۵ پایان نامه کارشناسی ارشد
 - ۱۹ اجرای بیش از ۱۵ طرح تحقیقاتی
- مجرای بیش را با سری میسیدی ه مشاور وزیر و مدیر کل دفتر همکاری های علمی و بین المللی در وزارت عتف (سال ۱۳۸۲ تا ۱۳۸۴) ه مدیر روابط بین الملل دانشگاه تربیت مدرس (سال ۱۳۷۸ تا ۱۳۸۲) ٠
- رئیس دانشکده مهندسی برق و کامپیوتر دانشگاه تربیت مدرس (سال ۱۳۸۸ تا ۱۳۹۱ و ۱۳۹۷ تا اکنون



(e)





- * سرپرستی بیش از ۲۰ رساله دکتری
- * هدایت بیش از ۵۰ پایان نامه کارشناسی ارشد
- استاد برجسته مهندسی منتخب فرهنگستان علوم در سال ۱۳۹۶
 پژوهشگر برتر دانشکده مهندسی برق، دانشگاه صنعتی شریف در سال ۱۳۸۴
 - استاد برتر دانشکده مهندسی برق، دانشگاه صنعتی شریف، در سال ۱۳۸۶
 - استاد برجسته استان مازندران، در سال ۱۳۸۹
 - اجرای بیش از ۱۰ طرح تحقیقاتی *



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nned with CamScanner

(f)





(g)





inned with CamScanner

(h)





(i)

scamed with camacanne





وابق علمي

- سی و کارشناسی ارشد مهندسی برق، دانشگاه صنعتی شریف (۱۳۶۳و ۱۳۶۵) کارشنام * دکتری مهندسی برق، دانشگاه Electro-Communications ، ژاپن (۱۳۷۸) ٠ انتشار و آرانه بیش از ۱۷۵ مقاله پژوهشی در مجلات و کنفرانس های معتبر بین المللی
 انتشار و آرانه بیش از ۱۷۵ مقاله پژوهشی در مجلات و کنفرانس های معتبر بین المللی
 ۱۳۸۰ تا ۱۳۸۴ * تدریس بیش از ۲۰ عنوان درس که ۱۲ عنوان متعلق به دروس پایه مهندسی برق و کامپیوتر هستند انتخاب به عنوان استاد برگزیده آموزشی در دانشگاه در سال های ۱۳۷۰ ، ۱۳۸۰ و ۱۳۸۴ * انتخاب به عنوان پژوهشگر برگزیده دانشگاه صنعتی شریف در سال ۱۳۶۹ * برنامه درسی دانشکده مهندسی برقرینه منطقه منطقی سریف ور سال ۲۰۰ برنامه درسی دانشکده مهندسی برق در دوره ریاست ایشان بازنگری شد مربوستی بیش از ۴۰ رساله دکتری *
 - - *
 - هدایت بیش از ۷۰ پایان نامه کارشناسی ارشد ٠



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Award

(m)





(n)

The 120th IEEE Region 8 **Committee Meeting**



رساله برگزیده دکتری

🗖 دکتر اشکان زندی

سر سب کی رسایی مهندسی برق الکترونیک ، دانشگاه تهران عنوان رساله : امکان سنجی کاربرد نانوسیمهای اکسید روی در تشخیص و درمان ،

🗖 اساتید راهنما: دکتر محمد عبدالاحد

- موابق تحمیلی و تخصصی:
 نیت ۱۴ اختراع در اداره ثبت اختراع امریکا (USPTO)
 ثبت ۱۴ اختراع در مرکز مالکیت فکری و ثبت اختراع ایران
 ثبت ۱۲ اختراع در مرکز مالکیت فکری و ثبت اختراع ایران
 ثبت ۱۲ اختراع در مرکز مالکیت فخری و دبت اختراع ایران
- ی به می بارد. ♦ بهترین مقاله پنجمین کنفرانس بین المالی علم نانو و کتبولوژی نانو (ICNN 2014) ♦ برنده مدال برنز مسابقات جهانی دانشمندان جوان (حضور به عنوان استاد راهنما و ایده پرداز) (سال ۲۰۱۸)

🗖 دکتر هدا زمانی

ØIEEE

، مور صدر صادی مهندسی کامپیوتر، دانشگاه آزاد اسلامی واحد نجف آباد عنوان رساله : ارائه الگوریتم های فرا اینکاری موثر مینفی بر رفتار پرندگان برای حل مسائل بهینه سازی با مقیاسی بزرگ

🗖 اساتید راهنما: دکتر محمد حسین ندیمی شهر کی

- سوابق تحصیلی و تخصصی :
 پژوهنگر برگزیده و داشجوی برتر در مقاطع کارشناسی ارشد و دکترا
 معرفی دو الگوریتم جدید و چاپ مقاله آنها در مجلات معتبر بین المللی
 انتشار ۱۵ مقاله در مجلات معتبر ISI دارای ضریب تأثیر بالا

- برنده مقام شایسته تقدیر در هفتمین جشنواره مخترعان، مبتکران و نواوران
 پژوهشگر ارشد در تیم تحقیقاتی تحلیل داده در مرکز تحقیقاتی مه داده
- * انجام ۳ پروژه در جهت استفاده هوش مصنوعی در حوزه سلامت و پزشکی



🗖 دکتر محمدرضا دانشور

مهندسی برق قدرت ، دانشگاه تبریز عنوان رساله : فناوری انرژی تعاملی در مدرنیزه کردن شبکه های چند حاملی انرژی

🖵 اساتید راهنما: دکتر بهنام محمدی ایواتلو، دکتر کاظم زارع

- 🖵 سوابق تحصیلی و تخصصی : ایک محقق پسا دکتری دانشگاه تبریز کامپیوتر دانشگاه تبریز
 - دکتری برق قدرت، دانشگاه تبریز (۱۴۰۰)
 چاپ ۱۶ مقاله JCR در مجلات بین المللی
 انتشار ۳ مقاله در نشریات علمی- پژوهشی
 - ارائه ۱۴ مقاله در همایشها و کنفرانسهای علمی معتبر
- ۲ کتاب تالیقی در Elsevier و Springer Elsevier کتاب تدوینی در Springer Elsevier و Wiley-IEEE و Wiley-IEEE
 - ۱۰ اجرای ۵ طرح پژوهشی داخلی و بین المللی
- 🛠 برگزیده به عنوان جوان برتر در حوزه علمی- پژوهشی در جشنواره حضرت علی اکبر (ع) در سال های ۹۷ و ۱۳۹۸ **ØIEEE**





عنوان رساله : برنامهریزی توسعه شبکه انتقال ترکیبی DHVAC/HVDC با درنظر گرفتن تبدیل خط HVAC به خط HVDC انحت نفوذ منابع تجدیدپذ

🗖 اساتید راهنما: دکتر تورج اَمرایی

🗖 سوايق تحصيلي و تخصصي :

- کارشناسی برق- قدرت، دانشگاه ارستان (سال ۱۳۹۴)
 کارشناسی ارشد برق- قدرت، دانشگاه شهید چمراه اهواز (سال ۱۳۹۶)
 دکتری برق- قدرت، دانشگاه خواجه نصیرالدین طوسی (سال ۱۴۰۰)

 - محقق پسا دکتری، دانشگاه تکنولوژی دلفت هلند (از سال ۱۴۰۱)
 انتشار بیش از ۱۰ مقاله در مجلات معتبر بین المللی



ØIEEE

(0)



مه برتر کارشناسی ارشد

رضا بهكام برق - قدرت صنعت بان نامه : کاربرد شبکههای عصبی مصنوعی برای تشخیص عیوب مکانیکی ترانسفورماتور قدرت با استفاده از نتايج أزمايشات تحليل پاسخ فركانسي (FRA)



هنما: استاد گئورگ قره پتیان، دکتر مهدی صلای نادری

صيلى و تخصصى :

مناسی ارشد مهندسی برق-گرایش سیستمهای قدرت از دانشگاه صنعتی امیرکبیر با معدل کل ۱۸/۵۳ مناسی مهندسی برق-گرایش قدرت از دانشگاه تبریز با معدل کل ۱۷/۱۷ ۹ مقاله در مجلات و کنفرانس های معتبر بینالمللی

، پروژه بینالمللی با عنوان "ارتقا و بهینه سازی روش های تفسیر نتایج روش FRA" تحت حمایت رک صندوق حمایت از پژوهشگران و فناوران ایران (INSF) و بنیاد تحقیقات آلمان (DFG)



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ن نامه کارشناسی ارشد قابل تقدیر

هندس سهیل حکاک زاده مهندسي برق - الكترونيك دانشگاه صنعتی شریف عنوان پایان نامه : بهبود کیفیت تصویر در تصویربرداری فتواکوستیک بر اساس تكنيك پنجره مصنوعي

بتاد راهنما: دکتر زهرا کاوهوش

وابق تحصیلی و تخصصی : • کارشناسی مهندسی برق، دانشگاه صنعتی خواجه نصیرالدین طوسی (سال ۱۳۹۸) اند قال می مند (۱۴۰۰ ا * كارشناسي ارشد مهندسي برق، دانشگاه صنعتي شريف (سال ١٤٠٠) * دانشجوی دکتری مهندسی برق، دانشگاه صنعتی شریف انتشار و ارائه بیش از ۱۵ مقاله در مجلات و کنفرانس های معتبر بین المللی ICBME 2021 موفق به کسب جایزه بهترین مقاله در کنفرانس ICBME 2021 • در حال حاضر با بیش از پنج گروه علمی معتبر از کشور های سنگاپور، هنگ کنگ، هلند و آمریکا در • انجام پروژه های علمی مشترک هستند



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(p)

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سید حامد خاتون آبادی و سید محمد مهندسي برق، الكترونيك دانشگاه صنعتی شریف

عنوان پروژه: طراحی و ساخت سنسور اندازه گیری تنفس

استاد راهنما : دکتر محمد فخارزاده

- سوابق تحصيلي و تخصصي :
- * دانشجوی دکتری، مهندسی برق، دانشگاه ایالتی میشیگان آمریکا
 - انتشار بیش از ۵ مقاله در مجلات معتبر بین المللی
 - * جزء دانشجویان برتر گروه برق، دانشگاه صنعتی شریف
 - م عضو بنیاد نخبگان



> IEEE

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فرهاد خدادای شریف آباد مهندسی برق، الکترونیک دانشگاه علم و صنعت عنوان پروژه: شتابدهنده سختافزاری الگوریتمهای هوش مصنوعی م FPGA

🗖 استاد راهنما : دکتر ستار میرزاکوچکی

- ہے الکترونیک، دانشگاہ
 - مهم و صنعت بیرن ۲۰۰۰ ۲۰ که دانشجوی برتر سال در بین دانشجویان کارشناد علم و صنعت ایران، ۱۳۹۵ الکترونیک، دانشگاه
 - انتشار و ارائه ۲ مقاله در کنفرانس و مجله **IEEE**



بمورى جروكاني

سی برق، مخابرات کاه آزاد اسلامی واحد نجف آباد پروژه: طراحی و بهینهسازی قطبندههای نوری مبتنی بر بلورهای فوتونی شامل مواد ناهمسانگرد

راهنما : دکتر بهنام صغیرزاده

حصيلي و تخصصي : ارشناسی برق، گرایش مخابرات، دانشگاه آزاد اسلامی واحد نجف آباد (سال ۱۴۰۰) نشجوی کارشناسی ارشد رشته مهندسی برق - مخابرات میدان و امواج، دانشگاه صنعتی شریف به ۱۴ کنکور سراسری کارشناسی ارشد عدل اول در سالهای متوالی دوره کارشناسی نبه سوم المپیاد ریاضی استان اصفهان در دوره دانش آموزی ک مقاله چاپ شده در مجله (Chics Communications (ELSEVIER



(q)







(r)



🗖 دکتر هیمن گل پیرا دانشیار، گروه مهندسی برق – قدرت دانشکده مهندسی برق و کامپیوتر، دانشگاه کردستان

🖵 تحصيلات و سوابق علمي

- الشناسی مهندسی برق، دانشگاه کردستان (۱۳۸۷)
- م کارشناسی ارشد مهندسی برق، دانشگاه تربیت مدرس (۱۳۸۹)
- دکتری مهندسی برق، دانشگاه تربیت مدرس (۱۳۹۴)
 Renewable Integrated Power System Stability and Control" توسط انتشارات Wiley -IEEE Press
 - انتشار و ارائه بیش از ۴۰ عنوان مقاله در مجلات و کنفرانس های معتبر بین المللی

 - اجرای ۴ طرح تحقیقاتی
 هدایت بیش از ۱۰ پایان نامه کارشناسی ارشد
 - * ثبت اختراع " شبیه ساز نرم طراحی ماشین"









(t)



Picture 3. The 13th IEEE Iran Section Awards Ceremony





Picture 4. Photo of the Open Data Hackathon 2022 final meeting



Picture 5. Sign and exchange of the MoU by Dr Seyed Mohammad Razavizadeh, head of the ICT Research Institute (right) and Prof. Vahid Ahmadi, the chair of IEEE Iran-Section (left)





The 120th IEEE Region 8 Committee Meeting





Picture 7. Open Data Challenge 2022