

Towards a Dynamic Section in EIC Technologies

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Abstract: – This is a brief report about the activities of Vietnam Section in 2015 – the 3rd year from the establishment of the Section. Although the number of the members are limited, the Section has many activities to promote the research and development of the community in the field of electronics, information and communications (EIC). Below are some significant events of the Section in 2015.

ICT related R&D environment

Computer Science

- Image Processing & Recognition
- Genomic Map Processing
- Natural Languages Processing (Vietnamese)
- Field Monitoring (vegetation fires, air pollution in Vietnam, land slice)

Communications

- Software Defined Radio
- 5G/Femto-Cell Networks
- Antenna Design and Optimization
- Beamforming Techniques

Electronics and Computer Engineering

- VLSI design for multimedia applications
- Low power LSI design for IoT devices
- Mixed-signal circuits and systems design, RF devices
- Organic, flexible, and printable electronics

Organization and Role Assignment

- Office: VNU Uni. of Engineering and Technology (VNU-UET)
- Email: ieicevn@vnu.edu.vn
- Management: VNU-UET's Dept. of S&T, International Relations



- Chairman: Prof. Ngoc Binh NGUYEN, VNU-IFI (nnbinh@vnu.edu.vn)
- Deputy-Chairmen: Prof. Xuan-Tu TRAN, Prof. Trong-Tu BUI
- Secretariat: Prof. Ngoc-Hung PHAM, Prof. Duc-Hung LE
- Website: <http://www.uet.vnu.edu.vn/ieicevn/>

Academic activities of the Section

Organization of International Scientific Events

- ICDV 2015 & VJMW 2015 joint events: the 6th Int'l Conf. on Integrated Circuits, Design, and Verification (10-11 August 2015) with around 100 participants. There are 2 keynotes, 53 invited/oral papers, 15 poster papers, one Distinguished Lecture
- Venue: HCM University of Science, Ho Chi Minh city.
- With ICD, VLD, Microwave committees, IEEE SSCS Vietnam.



Other events:

- Seminars, Lectures, technical support for other international conferences such as ATC 2015, RIVF 2015 in Vietnam.
- Technical support for annual national conference REV-ECIT 2015.
- Visit to University of Electro-Communications (UEC), Tokyo, Japan to promote cooperation between IEICE-VN, UEC, VNU-UET, VNU-IFI and REV (April 2015).



Strategy to extend the membership

- Further introduction of the IEICE to institutions and researchers.
- Benefit of the IEICE members, IEICE Trans. Publications...
- Collaboration with the Radio-Electronics Association of Vietnam (REV)

Plan for 2016

- Events: VJMW 2016, VJSAP 2016; Support for ATC 2016, etc.
- Lectures on LSI design, communications, IoTs, Big Data...
- Participate the LSI contest in Okinawa.
- Preferable topics to collaborate with regional Sections in Japan: LSI design, EDAs, Photonic Network, Microwave, Embedded Systems, Multilingual Processing and NLP...

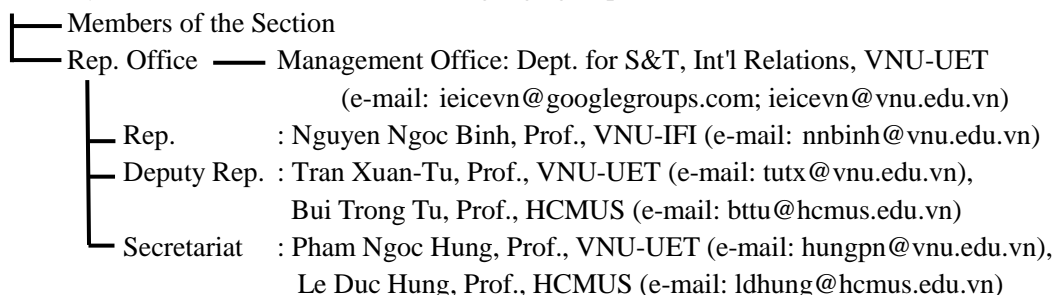
Annual Activity Report of IEICE Vietnam Section

Date of Report : 17 March 2016

Reporter : Nguyen Ngoc Binh, Prof., Dr., VNU-IFI

1. Organization

Assembly of the Section: Contact ieicevn@googlegroups.com; ieicevn@vnu.edu.vn



2. Strategy of the Section

- Good Forum and Environment for Contacts and Idea Exchange
- Well Connected by Emails and Website at <http://www.uet.vnu.edu.vn/ieicevn>

3. Action Plan of the Section Stated in 2015 All Sections Meeting

- Introduction of IEICE and IEICE-VN to Researchers and Lecturers
- Organization of International Scientific Events (ICDV, TMA, VJMW, ATC, ...)
- Participation into Activities of Regional Societies (REV, VAIP, etc.)

4. Results of Activities during the 2015 Fiscal Year (April 2015 ~ March 2016)

4.1 Conference/Symposium/Workshop

- ICDV 2015 & VJMW 2015 joint events: the 6th Int'l Conf. on Integrated Circuits, Design, and Verification (10-11 August 2015) with around 100 participants. 2 keynotes, 53 invited/oral papers, 15 poster papers, Distinguished Lecture - Venue: HCM University of Science, Ho Chi Minh city. - With ICD, VLD, Microwave committees, IEEE SSCS Vietnam.
- Seminars, Lectures, technical support for other international conferences such as ATC 2015, RIVF 2015 in Vietnam.
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- Visit to University of Electro-Communications (UEC), Tokyo, Japan to promote cooperation between IEICE-VN, UEC, VNU-UET, VNU-IFI and REV (April 2015).

4.2 Sponsored Lecture

Keynotes and/or Invited talks at ICDV-2015, VJMW 2015, VJSAP 2015 by IEICE experts.

4.3 Improvement of the Section

- Extended the membership through Joint Membership between IEICE-VN and Radio and Electronics Association of Vietnam (REV): IEICE members are recognized/accepted as REV members.
- Establishment of the Secretariat.

5. Review and Future Plan

(1) Items in 2015 Fiscal Year Plan which could not be achieved, and expected solution

- Collaboration with other IEICE Sections: not realized; Should be discussed at the annual meeting
- Expansion of IEICE-VN: not so active; Should improve membership activity and update the member list timely

(2) Activity Plan in 2016 Fiscal Year

a. Sponsorship of International Conferences

VJMW 2016, VJSAP 2016

b. IEICE Sponsored Lecture

The expected topics are listed as follows:

- EDA and VDEC in Japan: Experiences for Vietnam
- Lectures on LSI Design, Communications, IoTs, Big Data...

- Electronic Design Contest in Vietnam and LSI contest in Okinawa, Japan.
- Scientific Events in 2016-2017: ICDV, VJMW, VJSAP, ATC, REV-ECIT...

c. Co-sponsorship to International Conferences

- ATC 2016, etc. - Lectures on LSI design, communications, IoTs, Big Data...

d. Enhancement of IEICE membership

- Further Introduction of IEICE to Institutions and Researchers
- IEICE Transactions: ISI/Scopus Publications
- Benefits by IEICE Members

e. Collaboration with Japanese domestic sections

- Participation in the LSI contest in Okinawa. - Preferable topics to collaborate with regional Sections in Japan: LSI design, EDAs, Photonic Network, Microwave, Embedded Systems, Multilingual Processing and NLP

f. Collaboration with other international sections

- Japan: EDA, Photonic Network, Microwave, Embedded Systems, Multilingual Processing and NLP
- China: Information Security, Photonic Network, Chinese Character based Language Processing
- Thailand: Multilingual Processing and NLP, Microwave
- Korea: Cloud Computing, ICT Services
- Others: We are ready to cooperate on Computer Science (Image Processing & Recognition, Genomic Map Processing, Natural Languages Processing, Field Monitoring, etc.); Communications (Software Defined Radio, 5G / Femto-Cell Networks, Antenna Design and Optimization, Beam-forming Techniques, etc.); Electronics and Computer Engineering (VLSI design for multimedia applications; Low power LSI design for IoT devices, Mixed-signal circuits and systems design, RF devices, Organic, flexible, and printable electronics)

6. Constructive Opinion / Requests / Proposals

- (1) To kindly give strong support to the international conference on “ICs, Design, and Verification” (ICDV), an yearly/biyearly Special Issue on ICDV of the IEICE Transactions A (Fundamental) or D (Inf. & Syst.).
- (2) To kindly provide timely updated list of members registered directly to the Headquarter.
- (3) To kindly give a list of Papers of IEICE Publications by Vietnamese members; a list of Vietnamese participants into the IEICE events in the end of each year (if possible).
- (4) To kindly offer yearly financial support to maintain and develop the activities of the Section.