IEEE Victorian Section
Chair’s Report on 2016

IEEE Victorian Section AGM

University of Melbourne Graduate House, December 8\textsuperscript{th} 2016

Eddie Custovic, Chair
As at October 2016 the Victorian Section has 2066 members. The breakdown is as follows:

- **Members**: 1388
- **Senior Members**: 161
- **Fellows**: 19
- **Associate...**: Very small portion
- **Graduate Student Members**: 274
- **Student Members**: 196
- **Graduate Student Members**: 274
- **Senior Members**: 161

Members: 1388

Graduate Student Members: 274

Student Members: 196

Associate...: Very small portion

Fellows: 19

Senior Members: 161

Members: 1388
The decrease in associate members is perhaps expected. The increase in Senior Members is encouraging.
Membership Development

All IEEE Members in Victorian Section

2016 was a very successful year for student branches in Victoria with over 50 total events conducted. Collaborated events with affinity groups, chapters and other student branches.

Melbourne and La Trobe have continued being strong student branches over the past few years.

Monash and RMIT shown a rapid growth from the past years and ended the year as very active student branches.

Swinburne & Victoria Universities have become active and organized several events.

Student representatives from 4 Universities (Melbourne, Monash, RMIT & La Trobe) attended Region 10 SYWLM congress held in India.

University of Melbourne has won Outstanding Student Branch award (2015) and Region 10 Exemplary Student Branch award (2016).
IEEE Skill and Knowledge Exchange Roadmap

- IEEE Student Branches in Victorian Section organized a series of technical workshops at different Universities throughout 2016.
- 54 IEEE student members registered for the workshops.
- Total revenue of AUD 1100 was received from registration and net profit of AUD 500 was generated.

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Location</th>
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<tbody>
<tr>
<td>Solidworks</td>
<td>La Trobe University</td>
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<tr>
<td>Android</td>
<td>Monash University</td>
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<tr>
<td>Python</td>
<td>University of Melbourne</td>
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<tr>
<td>C++ Programming</td>
<td>RMIT University</td>
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<tr>
<td>MATLAB</td>
<td>Swinburne University</td>
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This year we had the best results and the maximum participation from Victorian Section for an IEEEEXTREME competition up to date

- A total of 56 students and 20 teams
- Global rankings 4 & 5. 4 Teams within top 100. 13 teams within top 500
IEEE Promotional Campaigns at Universities

- Several Universities promoted IEEE during open-day programs, orientation week’s and on the IEEE day.

- La Trobe and Melbourne Universities organized annual networking events
2016 was an exciting year for Victorian Young Professionals (YP)

On the 4th of May, YP team organised an interactive talk on Cloud Technology and Career pathways, conducted by Mr. Mobeen Malik, an IT Manager from Accenture Australia, held at University of Melbourne.
On the 30th July 2016, YP team collaborated with RMIT student branch, and visited LaTrobe Valley Coal mine.

In this program the participants got the opportunity to visit and learn about the coal power energy industry in LaTrobe Valley in Victoria. This event was funded by region 10 power & energy society young professionals activity grant.

A bus carrying 22 undergraduate, postgraduate students and young professionals travelled 150 km for 1.45 hours to regional Victoria to get this amazing experience.
On the 11th August 2016, YP team with Monash student branch, organised a talk “Get employed and thrive in Construction, Mining and resource sector” for electrical, mechanical and construction engineering students, at Monash University, Clayton. Guest speakers Tom Scash, Director, Training Ahead Australia, and Wes Malek, founder and owner of ECM Group, carried out the presentations, discussions and Q/A session.

Following the event, 600 AUD valued training reward was presented by training ahead Australia, to a chosen student.
On the 27th October 2016 we organised an interactive talk “What do you fear most Death, Taxes or Public Speaking?”, which was funded by IEEE region 10 activity grant. This event was predominantly organised for recent graduates and young professionals in Victoria region, as an opportunity to learn from an expert on how to become more confident when speaking in Public.
Technical Activities

• Over 70 high valuable technical events run by our societies

• Construction and the Cloud
• Google AdMob Challenge
• What is 5G, and when will it arrive?
• Fluorescent Nanoparticles for Biosensing and Biomedical Applications
• Workshop/Tutorial: EMC Essentials - from Grassroots to Advanced Design and Diagnostics
• Internet-of-Things (IoT), Embedded Systems and Arduino Revolution
• IEEE Distinguished Lecturer - Prof. Othman - WIMAX Networks
• Employment in Construction, Mining and Resource Sector
• Blind Source Separation: from basic concepts to new challenges
• Overseas Qualified Engineers: How to Help Yourself Get That Job
• Mobil Oil - Energy Thought Leaders Series
• Energy Harvesting for Sensor Networks
• IEEE YP Chapter:"What do you fear most Death, Taxes or Public Speaking?" by David J. Earley, Managing Director at SME Insurance Professionals Pty Limited
• IEEE Victorian Section, Computational Intelligence Chapter, "Niches of Population - based Optimisation Algorithms in Practice", Prof. Kalyanmoy Deb, Chair Professor at Department of Electrical and Computer Engineering in Michigan State University, USA
• IEEE Victorian Section, Computational Intelligence Chapter, "Research Topics on Evolutionary Objective Optimization", Prof. Hisao Ishibuchi
• Hearing Focused E-sewing/ Wearable Technology Hackathon
Community Engagement

Networking events such as the IEEE & Melbourne Convention Bureau Cocktail reception. This was an evening of networking to learn about the Section’s future direction, strategies regarding conferences and conference organisation.
Other Community Engagement Activities

IEEE Victorian Section
Student & Young Professional
Internship & Career Development Program

“Supercharge your career - Standout in the Crowd”

- 6th September 2016
  5:30 - 6:30 PM
  Building R4, Level 9, Room 12
  UNSW Sydney

- 9th September 2016
  5:30 - 6:30 PM
  Level 10 Boardroom,
  Monash University

- 12th September 2016
  5:30 - 6:30 PM
  Level 3, Richard Downey
  Monash University

Register Deadline: 30th September

Register online for successful completion of all three workshops

For information and job opportunities.

IEEE Advancing Technology for Humanity
2000 attendees had the opportunity to network with 22 companies, professional bodies and non for profits in the engineering & IT sector throughout the day.
Industry engagement

- Boojum
- PhiCom
- Spiral Systems
- ZodiCom
- AmpWest Communications
- BXP Consulting
- 4P Consulting
Awards and nominations

**Global Awards:**
- Outstanding Section Membership Recruitment and Retention Performance (2016)
- WIE Affinity Group of the Year Award (2015) – WIE Victorian Section

**Region 10 Awards:**
- WIE Outstanding Professional Volunteer Award (2016) – Mehrnaz Shoushtarian
- IEEE Regional Exemplary Student Branch Award (2016) – University of Melbourne Student Branch

**Australian Council Awards:**
- Outstanding Student Branch in Australia Council Award (2015) – University of Melbourne Student Branch

**Victorian Section Awards:**
- Outstanding Student Branch Award (2015) - University of Melbourne Student Branch
- Student Paper Competition Award (2016)
- First place awarded to Saman Asghari Gorji (Swinburne University) with paper “Galvanically Isolated Quasi Switched-Boost-Based DC/DC Converter”
- Second place awarded to Safiollah Heidari for the paper titled “iGiraph: A Cost-efficient Framework for Processing Large-scale Graphs on Public Clouds”
Merchandise

You can now purchase IEEE Victorian Section merchandise from our website. On offer are waterproof winter vests. The vests have the IEEE masterbrand on one side and the IEEE Victorian Section logo on the other (click on gallery for details). The vests are unisex.

Sizes available: Small (S), Medium (M), Large (L), Extra Large (XL)


Cost: IEEE student members: $40 IEEE non student members: $50
Conferences

INNOVATIVE SMART GRID TECHNOLOGIES


29 Nov – 2 Dec 2016.
Australian National Human-Computer Interaction Conference (OzCHI2016). OzCHI is the Australia's leading forum for the latest in HCI research and practice. OzCHI attracts a broad international community of researchers, industry practitioners, academics and students. Participants come from a range of backgrounds, including interface designers, user experience (UX) practitioners, information architects, software engineers, human factors experts, information systems analysts and social scientists. The conference theme is Connected Futures, highlighting the importance of connectedness through technology. http://www.ozchi.org/2016/

14-17 February 2016.
IEEE ICM (International Conference on Mechatronics), Gippsland, Victoria, Australia. The conference will be sponsored by the IEEE Power and Energy Society and the IEEE Victoria, Australia Section, and hosted by the Federation University. More information: http://ieee-icm2017.org/
The purpose was to get members to brainstorm and develop a strategic plan for running high value activities that would become the premium product of the IEEE Victorian Section. In addition to this, one of the goals of these events was to generate income for the section.

The main outcome from the meeting was organizing the Skills and Knowledge Exchange Roadmap (technical workshops) and the Employability Workshops.
The purpose was to find the best practices around the world in terms of sections, chapters, student branches and members retention. Some of these will be implemented for 2017:

- Information about awards; list of consultants on the IEEE page;
- Entrepreneurs’ Network Affinity Group and Consultants Network Affinity Group;
- More exposure to the media;
- To create summer schools for MS and PhD students, and also to give them the chance to request talk topics (and even to suggest certain speakers).
We launched our social media strategy this year.

Over 100,000 unique impressions throughout the year in our social media:

- Web page
- LinkedIn
- Facebook
- Twitter
2017

President of IEEE
14-18 August, Melbourne
Industry Engagement

Sydney 11-13 August
I change the world. I am an Engineer

Thank you very much!