

Highlights

IEEE Canada Spring Meeting Report
Scholarships and Awards

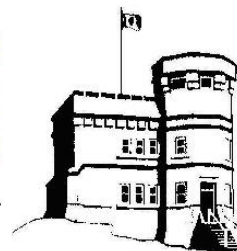
Upcoming

Annual Lobster Boil
NECEC 2007
CCECE 2009



IEEE

IEEE Newfoundland & Labrador Section
www.ieee.org/newfoundland_labrador



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Upcoming Events

Annual Lobster Boil



The Social Event of the Season!!

**Saturday, June 9, 2007, 6:30 for 7pm
Fluvarium, St. John's**

The highlight of the Section's social calendar will be held this year on Saturday, June 9, beginning at 6:30 for 7:00 PM. Once again, the location is the **Fluvarium** with its pleasant decor and great outdoor gallery. The weather, of course, is expected to cooperate for those who wish to wander outside in the early evening. If you don't wish to partake of the fresh, succulent Newfoundland and Labrador lobster as your main course, an alternate choice will be offered. Vegetarian fare will also be available. Your choice will have to be made when you purchase your ticket so the caterer can prepare and provide as requested.

Please bring your ticket with you to identify which meal you have ordered and to enter in the door prize draw.

The menu: All choices include 2 drink tickets for wine, beer, spirits or non-alcoholic beverage; roll; coffee or tea; and dessert. Remember to specify your choice when you purchase.

Choice #1: **Lobster** dinner
Choice #2: Roast beef or steak dinner
Choice #3: Vegetable stir fry with rice

Prices remain the same as last year: \$20 each for IEEE members, who may bring one guest for an additional \$20; \$30 each for non-members

For tickets, contact Paul Thorburn (Paul.Thorburn@nrc.ca) or any member of the executive. Tickets have to be purchased by **Monday, June 4** so that we can tell the caterer how many to feed.

See you there!

NECEC 2007

**Thursday, November 8, 2007
Holiday Inn, Portugal Cove Road**

Planning is well underway for the next Newfoundland Electrical and Computer Engineering Conference. The technical committee will be chaired by Dr. Cheng Li and Dr. Dennis Peters from Memorial University. The conference chair will be announced in the coming weeks.

For further details, check <http://necec.engr.mun.ca>, which will be updated by the end of May.

CCECE 2009

The Canadian Conference on Electrical and Computer Engineering (CCECE) is the flagship IEEE conference in Canada. It provides a forum for the presentation of electrical and computer engineering research and development from Canada and around the world. We are very pleased and excited to report that the NL Section will be the host for this conference in 2009.

The conference will take place from Sunday May 3rd through to Wednesday May 6th at the Delta St. John's Hotel and St. John's Convention Centre. The conference theme is "*Engineering, Science and Technology; the First Decade of the Third Millennium*". A welcome reception for all delegates will be held Sunday evening at The Rooms. The Conference sessions themselves, on Monday, Tuesday and Wednesday, will be conducted in the conference facilities at the Delta St. John's with plenary sessions, exhibits, and meals in the St. John's Convention Centre. In addition, an active and enticing social program will be offered to all attendees, partners, and guests.

The preparation for CCECE 2009 is off to a very promising start with a Planning Committee consisting of dedicated, enthusiastic and experienced volunteers, representing industry, academia, and government. We are honored to have Dr. Wally Read as our Conference Chair. We have the support of the Provincial Government, The City of St. John's, Destination St. John's, Memorial University, and the National Research Council.

We predict that CCECE 2009 in St. John's will be an unforgettable experience – an overwhelming technical and financial success that also offers a wealth of activities and networking opportunities for delegates. We hope to see you in 2009!

Past Events

IEEE Canada Meetings

The spring meeting of IEEE Canada (Region 7) took place April 27-29, 2007 in Vancouver. The Region meets twice annually to discuss activities and developments relevant to IEEE Canada. In addition to Region business these meetings provide a valuable networking opportunity for the IEEE Canada community in which we are able to share information and ideas between Sections. Our Chair and Vice-Chair attended these meetings and were pleased to report that we continue to have a thriving and vibrant section. In our report we highlighted some of the activities that we have been involved in over the last six months as well as upcoming events.

On April 27 there was training provided on Membership Development, Finances, and Ottawa Section Best Practices. Our business meeting included reports from the executive and committees of the region, review and audit committee report of the budget for 2007 and proposed budget for 2008, and presentations from CCECE 2007, the IEEE Canadian Foundation and EIC. Also, three very experienced candidates for IEEE Canada President Elect 2008 – Hilmi Turanli, Om Malik, and Rob Anderson presented their vision for

IEEE Canada and participated in a Q&A session. In addition, three candidates for IEEE President Elect 2008 – Mark Apter, John Vig, and Pedro Ray conducted presentations and answered questions. Information about these and other candidates is available on the IEEE Annual Election web page at <http://www.ieee.org/elections>. Your vote helps select tomorrow's leaders of the IEEE. We encourage you to stay informed about the election and learn about the candidates and also ensure your voice is heard during the balloting period.

Three Eastern Sections were interested in hosting the Canadian Conference on Electrical and Computer Engineering (CCECE) in 2009. Halifax (Canadian Atlantic), Quebec City (Quebec), and St. John's (NL) were the proposed host cities. Each Section presented their plan for CCECE 2009 and the Board voted. We are very pleased to announce that NL Section won the bid and will be busy planning for CCECE for spring, 2009.

The Montreal Section received the support of the IEEE Canada Board to host the 2007 Electrical Power Conference (EPC) 2007 with the theme "Renewable and Alternative Energy Resources". This conference will take place on Oct. 25 – 26 in Montreal, Quebec. The conference is organized and sponsored by IEEE Canada, IEEE Montreal Section and IEEE Ottawa Section. General Conference Chair is Dr. Bob Hanna, P.Eng, FIEEE, FEIC, President of IEEE Canada and IEEE Director (Region 7), President of RPM Engineering. For more information please visit: <http://www.ieee.ca/epc07>.

Plans are also underway for Sections Congress 2008 in Quebec City. This is an international IEEE event held every 3 years and provides Sections with training, networking, and development opportunities. The Section is planning on sending at least two candidates to represent Newfoundland and Labrador.

The next Board Meeting will be held October 19-21, 2007 in St. John's.

AGM

The Section's Annual General Meeting took place on Tuesday, December 5, 2006 at the S.J. Carew building located on the Memorial University campus.

The meeting began with a presentation entitled "Scribe – An Analog Transcription Aid" by Jonathan Anderson of Memorial University. This interesting and impressive presentation won first prize at the prestigious 2006 IEEE Canada Telus Innovation Awards final competition.

Following the presentation, the Section Executive members presented their annual reports on their individual responsibilities (e.g., treasury, membership development, awards, etc.). A question and answer session followed so as to clarify any questions or concerns that members had with respect to the governance of their Section.

A wine and cheese reception followed the meeting which gave attendees an opportunity to discuss Section activities in a more informal setting.

GOLD Financial Planning Seminar

The first GOLD Affinity Group event was a Financial Planning seminar held February 7, 2007. Thanks to Michael Kidney, Regional Manager, Life/Retirement and Investment Services for Great West Life, who gave a great talk on financial planning at all stages of life. Open to all IEEE members, the event was well attended and a lively question session followed. If you would like a copy of the presentation, please contact Lori Hogan (lori.hogan@ieee.org).

Stay tuned for more upcoming GOLD activities!

NECEC 2006

On November 9, 2006 the Section, in partnership with Memorial University, hosted the 16th annual Newfoundland

and Labrador Electrical and Computer Engineering Conference (NECEC) at the Holiday Inn in St. John's. The Conference Chair for NECEC 2006 was Gerard Dunphy from Newfoundland & Labrador Hydro and the Technical Chair was Dr. Eric Gill from Memorial University. This continues to be a very successful event enabling engineering professionals from both industry and academia in Newfoundland and Labrador to showcase technical developments and share experiences. We are pleased to report that this year we had 114 attendees and 61 papers (52 oral presentations + 9 posters) covering a wide range of technical subject areas. Our keynote speaker was Paul Dubé, Executive Director, Newfoundland and Labrador Association of Technology Industries. Our luncheon speaker was Dave van de Wetering, Nortel - Wireless Account Executive for Bell Aliant, who spoke on the evolution of wireless technologies. Four awards were presented:

- Best Industry Paper- John Anstey, *An Improved Feature Extraction Technique for High Volume Time Series Data*
- Best GOLD Paper - Reza Shahidi, *Orientation-Adaptive Image Decomposition*
- Best Student Paper – Dilan Amarasinghe, *Integrated Laser and Camera Sensor for Simultaneous Localization and Mapping (SLAM)*
- Best Poster - Isheeta Nargis, *ARTMAP-IC-LT: Incorporating Learning during Testing in ARTMAP-IC Neural Networks*

Following the technical sessions, we held a wine and cheese reception and awarded door prizes donated by our sponsors. Proceeds from this event and past conferences are used to sponsor IEEE Scholarships, which are awarded to students in the Electrical Engineering or Computer Engineering program at Memorial University of Newfoundland, as well as to support other activities within the province. The Planning Committee and Section Executive Committee would like to extend our sincere thanks to our speakers, presenters, sponsors, session chairs, volunteers, and others who contributed to our conference this year. It is much

appreciated and we look forward to NECEC 2007!

Awards

Term 4 and Term 6 Electrical-Computer Engineering Scholarships

The IEEE NL Section ECE Scholarships are awarded yearly to two full-time undergraduate students in Term 4 and 6, respectively.

In Fall 2006, the Term 6 scholarship was awarded to Simon Silk. Simon has shown a keen involvement in the technological community. He joined IEEE due to his strong interest in HI-FI audio. His participation in the NECEC conference exposed him to many exciting fields of electrical and computer engineering and he hopes to be able to take a cross-disciplinary approach in his career as a professional engineer. The scholarship winner is well deserving of congratulations and best wishes for every success in his future endeavors.

The competition for the Term 4 scholarship is ongoing.

IEEE Canadian Foundation Scholarship

In April 2007, Matthew Appleby was awarded with the IEEE Canadian Foundation Scholarship. Matthew is an electrical engineering student who has been involved in the student branch of the IEEE NL Section since first joining in 2004. He was an active participant in the NECEC 2004 and 2006 conferences. In January 2007 he became the IEEE Engineering Society A senior representative. Matthew is a member of the IEEE Communications Society and IEEE Engineering in Medicine and Biology Society.

IEEE Canada Women in Engineering Prize

This prize is sponsored by the Judy Clift Fund, which was established to honor a gracious individual who believed

strongly in gender equality. The purpose of the award is to recognize excellence in young women engineering professionals and to support the Women in Engineering programs within IEEE in Canada. The recipient of the 2006 Award was Mrs. Lori Hogan, member of the IEEE NL Section Executive Committee.



The 2006 Winner of the IEEE Canada Women in Engineering Prize (Lori Hogan) with Dr. Eric Gill.

Term 8 Student Project Awards

The annual IEEE Student Night, held in March, was again a great success. This annual event is put off by the members of the IEEE Student Society to congratulate the graduating electrical/computer engineering class as they present their final term projects and get ready for the next stage of their lives. The Electrical and Computer Engineering Term 8 class is required to produce a capstone project to demonstrate the skills and knowledge obtained throughout their post secondary education. IEEE Student Night featured three selected presentations, as well as tours and demonstrations of the projects completed by the students. The event allowed these highly creative and innovative projects to be displayed to the public, the student body, faculty members and judges. A reception followed allowing for some networking and relaxation. Everyone enjoyed a good night with impressive projects and an all around good time. We hope the event will continue to be successful for years to come.

The IEEE offers a variety of awards related to the final-year projects of the Electrical and Computer Engineering

graduating class. The categories of these awards are as follows: (1) Best Project Demonstrations, and (2) Best Oral Presentations. The awards consist of a monetary prize and a certificate. Depending on the category, decisions are reached based on peer, industry, and academic evaluations. This year the selected projects were of a very high caliber. Winners along with project titles were:

Best Demonstrations

David Carroll – “Electronic Goal Locator for the Blind”

Robert Powell – “Compact Hardware Implementation of KASUMI with Parity-Based Concurrent Error Detection”

Brad White – “Wireless Fencing”



Robert Powell with Dr. Eric Gill.

Best Presentations

1st Prize – Sushil Sancheti – “Wireless Calibration of a Distributed Sensor Grid”

2nd Prize – Jamie Warren – “Interactive Projection Screen”

3rd Prize – Robert Powell – “Compact Hardware Implementation of KASUMI with Parity-Based Concurrent Error Detection”

Science Fair Award

This year for the first time the local Section offered an award for the best project related to topics of interest to the IEEE at the Eastern Newfoundland Regional Science Fair. This award reflects the IEEE’s continuing interest in fostering the development of science and technology among our youth. The award consists of a monetary prize and an IEEE engraved plaque honoring the excellent effort of the recipients. The inaugural

prize was awarded to the team of Ms. Philippa Gosine and Ms. Erin Langor from MacDonald Drive Junior High for their project entitled *Sampling*. Their project involved experimenting with digital sampling of sounds and pictures.



Philippa (L) and Erin (R) with their award plaques.

Student Branch Activities

Within the co-op engineering program at Memorial University there are two student societies, Society A and Society B. When one society is attending classes, the other is on a work term. Following the recent changes in the Student Branch Executive Constitution, an executive has been elected that manages student activities for all IEEE student members. The majority of the new executive was elected in January and these were the results:

Society A

Alex Brown – Co-chair

Matt Appleby – Senior Representative

Susie Ryan – Junior Representative

Treasurer position currently vacant.

Society B

Robert Cove – Co-Chair

David Winsor – Treasurer

Chris Conway – Senior Representative

Chad Levesque – Junior Representative

Society A will be looking for a treasurer during this summer semester.

Each year the Student Branch hosts the Annual Industry Wine and Cheese Night, which provides the opportunity for students and industry members to mingle in a non-formal environment. Normally

this event occurs during the winter semester, but it was decided that it would be postponed to the summer semester. This gives students the chance to make industry contacts before they start seeking a position for after graduation. The new executive will be busy this summer preparing for the event.

The Student Congress will be held September 14-16, 2007 in Edmonton in conjunction with the IEEE Canada Fall Executive Meeting and the 2007 Telus IEEE Canada Finals. This is a great opportunity for one of the younger members of the executive because it gives them essential tools, skills and ideas on how to run and maintain a successful IEEE Student Branch. Robert Cove, current Society B Co-chair attended the 2006 Student Congress in Mississauga and reports that it was a major success.

If you are interested in becoming involved with the student branch or would like more information, please don’t hesitate to send us an email (ieee@engr.mun.ca). It’s a great opportunity to get involved in the world’s largest technical society.

Strong Showing at CS Games

Congratulations to the team of nine Computer Engineering students who competed in the Computer Science Games in Montreal. Proudly supported by the IEEE Newfoundland Section, the team placed 6th out of the 32 teams competing.

The event ran over three days, from March 9th to the 11th. There were various competitions throughout the weekend in which the team placed within the top three teams. The team placed 2nd in Artificial Intelligence and cryptography and tied for 1st in debugging. This is the best performance by a Memorial team to date, compared to its 23rd place showing last year. Way to go!

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