

Conference Report for 2013 IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2013)

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The 2013 IEEE Symposium Series on Computational Intelligence was held in Singapore from 15th of April to 19th of April. For the first time, IEEE SSCI was held in Asia following the success of the inaugural IEEE SSCI 2007 chaired by David Fogel in Honolulu, IEEE SSCI 2009 chaired by Vincenzo Piuri in Nashville and IEEE SSCI 2011 chaired by Bernadette Bouchon-Meunier in Paris.

36 Symposia and Workshops were held together in order to nurture emerging multi-disciplinary technologies and applications within the computational intelligence domain. Approximately 675 delegates from 59 countries registered to attend the IEEE SSCI 2013. The top eight countries with respect to the number of registrations were USA, China, Japan, UK, Singapore, Australia, Taiwan and India. There were over 200 delegates from Europe. There were 24 delegates from Nanyang Technological University, Singapore. Among the overseas institutions the top three were University of New South Wales, Australia (9 delegates), University of Malaga, Spain (7 delegates) and National Chiao Tung University, Taiwan (6 delegates).

Venue

The venue was Grand Copthorne Water Front Hotel which is a five star hotel

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Panelists are getting ready to commence the panel session with Professor Xin Yao as the moderator.

with over 500 guest rooms and 3 floors of meeting space. The IEEE SSCI 2013 occupied two floors with 15–20 meeting rooms including the Grand Ballroom. The delegates were served with coffee and tea from 7:45 a.m. to 5:30 p.m. on all four days. In addition, the delegates were treated with numerous delicious snacks during the conference including a couple of welcome snacks served at 7:45 a.m. on all four days. A welcome buffet dinner was served on 15th of April and buffet lunches were served on 16th to 19th April with well over 30 international dishes including an Indian vegetarian menu in each buffet meal. Conference Banquet Gala dinner was served on 17th of April with Chinese, Muslim and Indian vegetarian meal choices. Several awards were also presented during the banquet dinner.

Technical Program

Approximately 1025 papers were submitted to more than 40 listed events. The review process of these submissions was handled by the (co-)Chairs of each event. Papers submitted by all Chairs (including

the General Chair) were handled by CoI (Conflict-of-Interest) Chairs Gary Fogel and Hisao Ishibuchi who had such submissions reviewed offline by using e-mail exchanges. Eventually, a total of about 650 papers were scheduled for oral and poster presentations within 36 Symposia and Workshops co-located within the IEEE SSCI 2013. The largest nine events of the IEEE SSCI 2013 were CIDM (46), SIS (40), CIBCB (38), CICA (32), CIES (31), ADPRL (28), CCMB (24), CIASG (23) and SDE (22).

In addition to the technical review process, issues such as plagiarism and prohibited authors' list were also considered. iThenticate software was used to identify plagiarism. A few papers found to have plagiarized were removed from the proceedings in the last minute. In addition, one or two papers were removed as they were found to have been coauthored by one of the prohibited authors. Prohibited authors are those who have in the recent past violated IEEE's publication ethics and who are currently prohibited from publishing in any IEEE publication.

IEEE SSCI 2013 was very fortunate to have so many top quality panel, keynote and tutorial speakers. The panel session on “Future Research and Funding Challenges for Computational Intelligence” took place on 16th of April from 3:30 p.m. to 5:30 p.m. Over 50 keynote and tutorial talks were held in two rooms on all four days. These sessions were very popular among the delegates. Several of these talks were recorded and will become available online from IEEE’s multimedia resource center.

The IEEE SSCI 2013 program PDF file is available online at http://web.mysites.ntu.edu.sg/epnsugan/PublicSite/Shared%20Documents/SSCI-2013/Prog-Book_forweb.pdf.

Awards

Three IEEE CIS wards were presented by the IEEE CIS President, Professor Marios Polycarpou during the conference dinner on 17th of April:

- 1) Outstanding Early Career Award was received by Dr. Zhi-Hua Zhou
- 2) Outstanding Ph.D. Dissertation Award was received by Dr. Haiping Lu
- 3) Outstanding Chapter Award was received by Dr. Amit Kumar from Hyderabad Chapter, India.

IEEE SSCI 2013 also awarded several outstanding paper awards. Chairs of each event nominated outstanding paper candidates. I also selected all papers with overall weighted review score more than 6 out of 7. These two selection steps resulted in 50 papers. Chairs of events were asked to vote on these 50 papers. Based on votes from over 15 chairs of events, 15 papers were selected for the award committee to evaluate during the conference. The award committee (Professors Sanghamitra Bandyopadhyay, Dipankar Dasgupta, Gui DeSouza, Vladik Kreinovich, Jane Jing Liang, and the Coordinator N. Sundararajan) selected the following five papers to receive the awards:

The **best overall paper award** was presented to Andrew R. Buck and James M. Keller for their paper entitled “A



Overall best paper award winners Andrew R. Buck and James M. Keller with IEEE CIS President, General Chair of SSCI 2013 and Coordinator of the Award Committee.



Best student paper award winner Liam A. Comerford with IEEE CIS President, General Chair of SSCI 2013 and Coordinator of the Award Committee.

Graph based Memetic Approach to Sketch Geolocation.”

The **best student paper award** was presented to Liam A. Comerford for his paper coauthored with Ioannis A. Kougoumtzoglou and Michael Beer and entitled “An Artificial Neural Network Based Approach for Power Spectrum Estimation and Simulation of Stochastic Processes Subject to Missing Data.”

Three **equivalent overall runners up** are:

- ❑ Mardé Helbig and Andries P. Engelbrecht, “Issues with Performance Measures for Dynamic Multi-objective Optimization”
- ❑ Syed A. Pasha and Philip H.W. Leong, “Cluster Analysis of High Dimensional High Frequency Financial Time Series”
- ❑ Dumidu Wijayasekara and Ondrej Linda and Milos Manic, “Shadowed Type-2 Fuzzy Logic Systems.”

In addition, several IEEE CIS travel grants were given away to student authors and also authors from developing countries.

Meetings

Several meetings were co-located with the IEEE SSCI 2013. On 15th of April, the IEEE CIS ExCom meeting was held. Subsequently, the following events were also held during the conference period:

- ❑ Fuzzy Technical Committee Meeting
- ❑ Intelligent System Applications Technical Committee (ISATC) Meeting
- ❑ ALIFE-Task Force Meeting
- ❑ Data Mining Technical Committee (DMTC) Meeting
- ❑ Senior Member Elevation Clinic
- ❑ Bioinformatics and Bioengineering Technical Committee (BBTC) Meeting
- ❑ Emergent Technologies Technical Committee (ETTC) Meeting
- ❑ Women in Computational Intelligence (WCI) Meeting
- ❑ Computational Intelligence Applications in Smart Grid-Task Force (CIASG-TF) Meeting
- ❑ Adaptive Dynamic Programming and Reinforcement Learning Technical Committee (ADPRLTC) Meeting
- ❑ Standards Committee Meeting
- ❑ Games-Technical Committee Meeting
- ❑ FML, ECML and XES Standardization Meeting
- ❑ Computational Finance and Economics Technical Committee (CFETC) Meeting.

Photos of IEEE SSCI 2013

Photos taken during the conference are available on the web pages of IEEE SSCI 2013.

Acknowledgments

I wish to thank all researchers who submitted papers, reviewed manuscripts, attended the event or assisted in one way or another. IEEE SSCI 2013 was very fortunate to have so many top quality panel, keynote and tutorial speakers. I sincerely thank them all. Chairs of each event contributed exceptionally by attracting contributions, getting them reviewed, making

accept – reject recommendations, developing the programs and so on. With numerous chairs and cochairs, all submissions (co)authored by chairs, cochairs and general chair were handled by CoI Chairs Gary Fogel and Hisao Ishibuchi who had such submissions reviewed offline to maintain the anonymity of the reviewers. Even though Finance Chair, Robert Kozma is far away in the USA, he regularly interacted with me and shared his valuable experiences gained in organizing numerous conferences. I thank the best paper award committee who did a

wonderful job by thoroughly evaluating 15 short-listed papers during the conference. Publication Chair, Sundaram Suresh has contributed immensely by registering every event with IEEE, ensuring the copyright submissions, setting up the PDF Xpress account, checking plagiarism and by excluding the prohibited authors from the published proceedings. When we have a significant keynote and tutorial program, there is also an associated responsibility shouldered by the respective Chair, Swagatam Das. I also thank the international advisory committee and the pub-

licity committee for their valuable contributions to IEEE SSCI 2013. Finally, I acknowledge the support of IEEE Computational Intelligence Society officers, technical committees and the task forces to make the IEEE SSCI 2013 a great success.

IEEE SSCI 2014

The next edition of the IEEE SSCI will be held in Orlando, Florida in December 2014. The details can be found at: <http://www.ieee-ssci.org>. We look forward to another successful IEEE SSCI meeting in the Disneyland.

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Conference Report for 2013 IEEE Congress on Evolutionary Computation

The 2013 IEEE Congress on Evolutionary Computation took place at the Fiesta Americana Grand Coral Beach hotel, in Cancún (México) from 20 to 23 June 2013.

We had 751 submitted papers, of which 443 were accepted for presentation. More than 2000 authors from 62 countries submitted papers for the conference. The five top countries in terms of number of submissions were: 1) Brazil (with 89 papers), 2) Mexico (77), 3) China (66), 4) Japan (58) and 5) USA (53). We had an international program committee consisting of more than 580 members from all over the world who thoroughly reviewed all the conference submissions. The program included 33 special sessions and 24 free tutorials. There were three keynotes, four competitions, two panels, an art exhibit and a Senior Member Elevation Clinic. The keynote addresses included “What’s Up with Co-evolutionary Algorithms?”, that was given by Kenneth de Jong from George Mason University (USA) while



The technical sessions (both oral and poster presentations) were well attended.

Thomas Stützle from the Free University of Brussels (Belgium) spoke on “Automated Algorithm Configuration: Methods, Applications and Prospects,” and Bernhard Sendhoff from Honda Research Institute Europe (Germany) presented “Engineering Design with Evolutionary Computation and Data Analytics.”

The award for the overall best paper went to Thaeir Jayyousi and Robert

Reynolds for “Using Cultural Algorithms to Generate Models of Ancient Urban Centers: The Monte Alban Example” and the runner up overall paper went to Alan Lockett for “Measure-Theoretic Analysis of Performance in Evolutionary Algorithms.”

The best student paper award went to Ricardo Cerri, Rodrigo Barros, Andre Carvalho and Alex Freitas for “A Grammatical Evolution Algorithm for