# IRSS 2016 Election - Vision Statements

## **Advisory Board Chair**

#### Ahmad Taher Azar

Benha University, Egypt http://www.bu.edu.eg/staff/ahmadazar14

My role as Advisory Committee (AB) Chair will be focused on achieving the following objectives:

- Coordinate the different exercises of the admonitory board and lead consultative executive gatherings amid the Annual Conference.
- Work with the Executive Office staff to recognize issues that need consideration and discourse.
- Work with the Executive Office and President to recognize new individuals from the admonitory board every year.
- Coordinate correspondence with the Division Representatives and the Executive Office
- Give composed reports to the Board of Directors twice yearly.
- Deal with the counseling board site.
- To help the consultative board act as a group by (i) perceiving and utilizing individuals' qualities, (ii) appointing adequately and elucidating goals.

### Bijan Davvaz

Yazd University, Iran <a href="https://pws.yazd.ac.ir/davvaz/">https://pws.yazd.ac.ir/davvaz/</a>

Rough sets for real life problems: In real life we deal with many phenomena and problems that we have not complete information about them. Some important parts of them are related to economics, management, industrial engineering, medical sciences, and social sciences. On the other hand, rough set theory is a mathematical approach to deal with inexact, uncertain or vague knowledge. Since rough set theory is emerging as a powerful theory dealing with imperfect data, we expect this theory applies more seriously and wide attention on the above research areas.

Although rough set theory is an interesting and powerful tool in knowledge, unfortunately many scientists and mathematicians are not familiar to this theory. One of the main plans should be try to absorb related scientists and mathematicians to work on this theory.

#### Aboul Ella Hassanien

Cairo University, Egypt <a href="http://www.fci.cu.edu.eg/~abo/">http://www.fci.cu.edu.eg/~abo/</a>

Keep rough sets/non rough sets members excited about rough sets society by giving them updates at times that leads to get new members.

#### Masahiro Inuiguchi

Osaka University, Japan <a href="http://www-inulab.sys.es.osaka-u.ac.jp/?page=en-inuiguchi">http://www-inulab.sys.es.osaka-u.ac.jp/?page=en-inuiguchi</a>

Toward Rough Set Innovation in a Data-driven World:

Internetworking of physical devices, vehicles, buildings and other items, brings a lot of data, so-called Big Data, with a growing speed. The demands and expectation toward data mining and knowledge discovery are also increasing. In such circumstances, we, rough set researchers, can find and clarify the importance and roles of rough set approaches. We need to adapt rough set approaches to the situation of Big Data, so as to demonstrate and convince people to the advantages of rough set approaches. Moreover, not necessarily in response to the demands and the expectation but in a general sense, new ideas from novel viewpoints on rough sets are requested for further developments. Finally rough set approaches have to be coupled with other methods of data mining, knowledge discovery, and decision aiding, in order to create new and more efficient methods of computing and reasoning about data.

The international rough set society (IRSS) is required to take the initiative toward these developments and innovation. It should stimulate members by providing information about new trends and techniques in rough sets and related fields, and offer a good opportunity for members to exchange their ideas and results of investigations toward mutual developments and collaborations. Moreover, it should encourage and support the studies by students and young researchers in rough sets and related fields. To fulfill those roles of IRSS soundly, the following activities would be required.

(1) The continuation of series of conferences specialized in rough sets alone or hybridized with other paradigms, i.e., RSCTC, RSFDGrC, RSKT, RSEISP, and their joint conference, IJCRS (International Joint Conference on Rough Sets) is absolutely important. These conferences should attract many researchers in rough sets and their applications, and provide the friendly atmosphere as well as opportunities that members can know up-to-date trends and techniques, and exchange their ideas and results. The conference would be the best opportunity for IRSS to provide its services to members, because many members get together at one place. Having a panel discussion and group meetings on some special topics would work well for further developments of rough sets. Moreover, the organization of an evening school and tutorials during the conference might be good for developing knowledge and skills of young generations and for spreading out news about theory and methods. It is desired to find some budget supporting graduate students' registration and awards for young scientists.

- (2) Encouraging members to organize rough set sessions at other international conferences related to rough sets, like IEEE, EURO, IPMU, AAAI, IFSA, ECML,ICML, PKDD, INFORMS, etc. is necessary. This works well for spreading out interest of rough set methodology outside the rough set community.
- (3) The LNCS Transactions on Rough Sets (TRS) journal is the flagship journal of IRSS, and members of the IRSS should be encouraged to publish their results in this journal. It would also be good to organize more frequently special issues on rough sets in some JCR journals. From the papers submitted for the rough set conferences, we may find topics of special issues, and also we may ask for proposals of special issues from members.

Those would be a part of many views required for enhancing the activities of IRSS. IRSS would undertake necessary tasks with the best of intentions toward the evolution of rough sets.

### Tsau Young (T. Y.) Lin

San Jose State University, USA http://roughsets.home.pl/www/images/2016election/tylin\_statement.pdf

Please see pdf file of statement.

### **Duoqian Miao**

Tongji University, China <a href="http://www.tongji.edu.cn/~dqmiao/">http://www.tongji.edu.cn/~dqmiao/</a>

I am Duoqian Miao, a full professor of Tongji University, located in Shanghai, China. I was elected the Chair of Rough Set and Soft Computing Professional Committee of China in 2012. I was elected the Steering Committee Chair of International Rough Set Society in 2014. And I was elected the IRSS Fellow in 2015.

As the Chair of RSSC, I work hard and made the annual national academic conference on Rough Set more influence in China, the number of participants increased from 200 to nearly 500. I strived to develop new members of the committee, 100 new members increased each year, up to now the total number of members reached more than 1000. Our Professional Committee was rated as excellent committee in 2014 and 2015 by Chinese Society of Artificial Intelligence.

As the SC Chair and a Fellow of IRSS, I Actively participated in the organization of international conferences, peer review, nomination and election of senior members and fellows of IRSS. In these 2 years, I keep in close touch with all SC members. And as a liaison between Steering Committee and Executive Board, I tried to promote the implementation of the task of Executive Board.

If I were elected AB Chair, I will, as always, complete the task that will be given by the bylaw of IRSS. I will work with all AB members to further promote the development of IRSS. I believe that our society will become better and better.

#### Sheela Ramanna

University of Winnipeg, Canada <a href="http://ion.uwinnipeg.ca/~sramanna/">http://ion.uwinnipeg.ca/~sramanna/</a>

- I will actively seek ideas from AB members to launch new initiatives of the society.
- I will promote existing initiatives already in place.
- I will ensure that AB Chair duties as outlined in the IRSS Constitution are carried out.

### Dominik Ślęzak

University of Warsaw & Infobright Inc., Poland http://www.dominikslezak.org/index.php?lang=en

The goal of IRSS is to promote rough set theory and its applications, to encourage initiatives leading toward combining rough sets with other approaches, and to support journals and conferences that can be fully or partially related to rough sets. Some of the major challenges in front of IRSS in the current days are as follows: to show that rough sets and the methods inspired by rough sets can be successfully utilized in big academic and industry projects; to encourage textbooks and teaching materials clarifying the current state of rough set theory and applications comparing to the seminal book authored by Professor Zdzisław Pawlak in 1991; to work on the prestige of the series of annual IJCRS conferences organized in different regions of the world; and to investigate opportunities to establish a new journal or a journal sub-series which – together with Transactions on Rough Sets and other current journals related to rough sets – would strengthen the worldwide recognition of rough sets.

The role of the IRSS Advisory Board is to support the IRSS Officers in the above goals, as well as any other goals formulated by the IRSS Officers and the IRSS Steering Committee. Additional goal may be to work on simplification of the IRSS Constitution (one of possibilities for the future is to merge the IRSS Steering Committee and the IRSS Advisory Board into a single body, chaired directly by the IRSS Vice President), so the IRSS structure gets clearer and more encouraging to new members.

#### Wei-Zhi Wu

Zhejiang Ocean University, China <a href="https://www.researchgate.net/profile/Wei\_Zhi\_Wu">https://www.researchgate.net/profile/Wei\_Zhi\_Wu</a>

As the Advisory Board Chair of IRSS, if elected, I will be very pleased to work with the President, the Vice President, members of Steering Committee, members of Advisory Board, and everyone in the Rough Set Society.

I would like to make opportunities for expanding the research of rough sets including theoretic aspects, methodologies, and real-life applications of rough-set-data-

analysis to other research fields, especially, to big data analysis in remote sensing. I will cooperate with my other Council colleagues to encourage new researchers into the rough set community. I will also strongly support active members of the rough set community in organizing forums, such as rough set conferences, workshops, and special sessions on other conferences, for exchanging new ideas and results.