

Minutes of Intelligent Systems Subcommittee Meeting
IEEE-PES GM Tampa
Monday, June 25, 2007, 3 pm to 5 pm, Marriot Meeting Room 4

Chair: Dagmar Niebur, Drexel University
Vice-chair: Stephen McArthur, University of Strathclyde
Technical Secretary: Ganesh Kumar Venayagamoorthy, Missouri University of Science and Technology

Meeting started at 3.11 pm.

An attendance list was taken with people writing their names and contact email information.

The Chair welcomed everyone to the IS subcommittee meeting and asked everyone in the room to introduce themselves.

1. Approval of minutes of IS subcommittee meeting at IEEE PES GM 2006

The minutes of IEEE PES GM 2006, Montreal was reviewed for corrections and the minutes were approved unanimously.

2. Announcements

The three task forces of the IS subcommittee have grown and are now promoted to working groups and recommended to form new task forces if needed.

- Intelligent Control Systems Working Group
- Multi-Agent Systems Working Group
- Intelligent Data Mining and Analysis Working Group

There are four panel sessions in this meeting namely –

- Tuesday, 6/26/2007, 14.00 to 17.00, Practical Applications of Intelligent Data Mining in Power Systems
- Wednesday, 6/27/2007, 09.00 to 12.00, Multi-Agent Systems: Practical Applications on Power Systems
- Wednesday, 6/27/2007, 14.00 to 17.00, Intelligent Techniques for Power System Transmission Control
- Thursday, 6/28/2007, 09.00-12.00, Analysis of Faults and Cascading Events Using Intelligent Techniques.

There were no paper sessions at this meeting.

The next GM meeting will be in Pittsburgh, July 20 – 24, 2008.

3. Task Force Activities

3.1 Task Force on Multi-Agent Systems: Steve McArthur

About 30 people in attendance at the TF meeting. The TF currently has about 60 members internationally. The chair of the TF mentioned that two papers have been reviewed by the IEEE Trans. on Power Systems. Tutorials are planned by the TF for 2009 based on these Transaction papers. It is expected that the TF will develop some MAS software with some practical demonstration.

Resources on multi-agents for power systems will be made available on a web-site. Two TFs will be formed now that this TF has been promoted to a working group, focusing on i) Agent Research and ii) Agent Ontologies.

Two panel sessions are proposed for GM 2009 – i) Joint panel between CAM/MAS TFs on “Building and Implementing MAS” and ii) Agent Based Modeling in Power Engineering.

3.2 Task Force on Intelligent Data Mining and Analysis: Surya Santoso and Germeno Lambert-Torres

The task force meeting had 20 people in attendance. The TF is planning a webpage. A proposal for a tutorial on “Application of Data Mining” is planned for GM 2008. Panels are planned for T & D 2008 and GM 2008.

The IS subcommittee Chair mentioned that procedures for tutorial proposals will be emailed to TF chairs. Chair also said that the subcommittee should limit the tutorials to two.

3.3 Task Force on Intelligent Control Systems (ICS): Ganesh Kumar Venayagamoorthy

The TF on ICS had 29 people in attendance and participation at its meeting. There several other people that have expressed in the activities of the TF that could not be present in Tampa. The TF has a membership of close to 50 members worldwide.

The website for the TF is active and members are encouraged to provide feedback to improve it. The new link is <http://web.mst.edu/~ganeshv/pes.htm>.

The Chair of the TF announced the call for book chapters. Two edited books are planned. One on “Intelligent Techniques for Power System Generation” and the other on “Intelligent Techniques for Power System Transmission”.

A panel is planned for GM 2008 on “Intelligent Techniques for Power System Distribution Control” and potential panelists have been identified.

A proposal for a tutorial will be made for GM 2009 on “Evolutionary and Swarm Intelligence Techniques for Power Systems”.

The Chair announced that TF has sponsored a panel session on “Intelligent Techniques for Power System Transmission Control” at this meeting.

3.4 New Task Force Activities

Mo-Yuen Chow and M Kezunonic announced their Task Force on “Intelligent Fault Management”. They had 12 people present at their first meeting. The scope of the task force will be emailed to IS subcommittee. The new TF will organize a panel at the GM08.

Another new Task Force announcement was made by Kwang Lee. This TF will focus on “Heuristic Optimization Techniques” and a similar proposal was made by Istvan Erlich for a TF on “Stochastic Optimization”.

The Chair and members of the IS subcommittee suggested the two TF proposals be merged and the TF will called “Task Force on Heuristic Optimization Techniques”. This TF will include its scope modeling uncertainties, risk management. A potential panel is considered for GM 2008 on these topics.

4. Other Technical Activities

- None

5. Panel and Paper sessions for GM 2008 and T&D 2008

The following panels were proposed for GM 2008:

- Agent-Based Test Beds for Restructured Electricity Markets by the MAS TF
- Building the Smart Grid with Collaborative Agents by the joint CIM/MAS TFs
- New Trends of Intelligent Data Mining by the Intelligent Data Mining and Analysis TF
- Intelligent Techniques for Power System Distribution Control by the ICS TF.
- Fault Analysis and Fault Management using Intelligent System Solutions by the new TF on Intelligent Fault Management.
- A panel by the new TF on Heuristic Optimization will be considered.

The Intelligent Data Mining and Analysis TF proposed to have a panel at the T & D 2008.

6. Tutorials

The three task force chairs – S McArthur, G K Venayagamoorthy and S Santaso expressed intention to hold tutorials at 2009 GM.

7. Upcoming Conferences for 2007 were announced.

8. Other Business

None

9. Next Meeting

The formal subcommittee meeting will at the PES GM 2008 in Pittsburgh.

The meeting was adjourned at 4.38 pm.

Respectfully submitted,

Ganesh Kumar Venayagamoorthy