The 2007 IEEE Swarm Intelligence Symposium (SIS07) is held in Honolulu, Hawaii, USA, April 1-5, 2007. It is held together with the other 11 symposia as a part of the 2007 IEEE Symposium Series on Computational Intelligence (SSCI07). SIS07 is sponsored by the IEEE Computational Intelligence Society.

On behalf of the SIS07 Organizing Committee, it is our pleasure to present to you the proceedings of the fourth SIS conference. This conference covers researches, developments, and applications of swarm intelligence which includes particle swarm optimization, ant colony optimization, cultural algorithms, swarm robotics, and swarm-like topics.

The SIS07 received totally 102 paper submissions, among which, 52 papers are about particle swarm optimization, 22 papers are about ant colony optimization, 3 papers are about culture algorithms, 15 papers are about swarm robotics, 10 additional papers on other various swarm intelligence studies. All the 102 papers underwent a standard peerreview process that involved three independent reviewers. Fifty four papers were accepted to be included in the proceedings of the symposium.

SIS07 features four tutorials. The tutorials are offered by well-known researchers in their respective research areas. One tutorial is on cultural algorithms by Dr. Robert G. Reynolds, one tutorial on introduction to particle swarm optimization by Dr. Russell C. Eberhart and Dr. James Kennedy, one on recent advances in particle swarm optimization by Dr. P. N. Suganthan, and the fourth one on ant colony optimization by Dr. Martin Middendorf.

As the co-chairs of the SIS07, we would like to take this opportunity to thank all of the SIS07 Organizing Committee members who assisted in making SIS07 successful, as well as the program committee members and reviewers who added quality and value to the SIS07. Special thanks go to all the authors and to Dr. David Fogel, the general chair of SSCI07. It is thanks to them if SIS07 is a great success.

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