University of Maribor

Faculty of Electrical Engineering and Computer Science

Lecture Notes in Computer Science
LNCS LNAI LNBI

7-th Joint International Conferences on
Swarm, Evolutionary and Memetic Computing Conference (SEMCCO 2019)
&
Fuzzy And Neural Computing Conference (FANCCO 2019)

July 10–12, 2019

Faculty of Electrical Engineering and Computer Science, University of Maribor
Venue: Hotel City Maribor, Maribor, Slovenia, EU

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Introduction:
The SEMCCO 2019 is the seventh international conference of this series, where SEMCCO 2010 has been successfully organized at SRM University Chennai, SEMCCO 2011 at ANITS, Visakhpatnam, SEMCCO 2012 at SOA University, Bhubaneswar, SEMCCO 2013 at SRM University, Chennai, SEMCCO 2014 at SOA University, Bhubaneswar, and SEMCCO 2015 at Hyderabad, India. The FANCCO 2019 is the fifth international conference of this series, collocated and co-organized with SEMCCO. These conferences aim at bringing together researchers from academia and industry to report and review the latest progresses in the cutting – edge research with Swarm, Evolutionary, Memetic, Fuzzy, and Neural computing to explore new application areas and to design new bio – inspired algorithms for solving specific hard optimization problems and finally to create awareness on these domains to a wider audience to practitioners. Therefore, researchers are encouraged to submit their contributions in both theoretical and practical aspects.

Theme:
The topics of the conference is related to the following (but not limited to):
Genetic Algorithms, Genetic Programming, Evolutionary Programming and Evolution Strategies, Combinatorial Optimization and Metaheuristics, Artificial Immune Systems (AIS), Differential Evolution (DE), Particle Swarm Optimization (PSO), Ant Colony Optimization (ACO) and ant systems, Bacterial Foraging algorithms (BFA), Harmony Search (HS), Cultural Algorithms, Artificial Bees and Fireflies Algorithms, Artificial Life and Digital Organisms, Swarm Robotics, Evolvable Hardware, Estimation of Distribution Algorithms (EDA), Stochastic Diffusion Search (SDS), Self-organization in Swarms, Adaptation in Evolutionary Systems, Quantum and Nano-computing, Common sense computing, Membrane computing, Solving single objective, multi-objective, dynamic and large-scale optimization problems with swarm and evolutionary algorithms, Novel concepts of memetic computation, Memes, memeplexes, meta-memes in computing and high-order evolution, Meme-gene co-evolutionary frameworks and multi-inheritance model for various practical applications. Parallel memetic framework for practical applications, Partial or full or meta – Lamarckian/ Baldwinian, meta – learning, agent based memetic computation.
Neural Network theory & models, Learning and adaptation, Computational neuroscience, Cognitive models, Brain-machine interfaces, Neurodynamics, Neuroinformatics, Neuroengineering, Neural hardware.
Fuzzy Set theory, Type II Fuzzy Logic, Decision Making, Rough Set theory, Hybrid Fuzzy System.
Collective intelligence, Hybrid systems with fuzzy, Swarm, evolutionary methods Computational biology, Bioinformatics, Artificial life.
Application in the domain of Signal image / speech processing / time series analysis. Other applications like Pattern Recognition / Machine Intelligence / Machine Vision / Data Mining / Robotics / Sensor Networks etc.

Publication:
Prospective authors are invited to submit paper(s) with up to 12 pages written in A4 size and as per the LNCS, Springer format, on any one of the conference topics. The proceedings will be published by LNCS series of Springer (Pending Approval).

Important Dates:

Submission of Full Manuscript	**10 April 2019**
Notification of Acceptance	**20 April 2019**
Camera ready copy	**5 May 2019**
Submission of Tutorial Proposals	**1 March 2019**
Submission of Special Session Proposal	**1 March 2019**
Early Registration	**15 May 2019**

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Paper Submission: https://easychair.org/conferences/?conf=semcco2019andfancco2
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