Welcome to the

10th Foundations of Genetic Algorithms Workshop (FOGA X)

January 9-11, 2009
Orlando, Florida

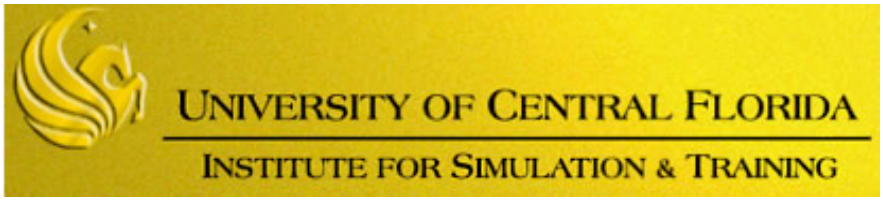
With special thanks to:

Parabon Computation, Inc.
Tiger Mountain Scientific, Inc.
UCF Institute for Simulation and Training
UCF Office of Research and Commercialization
UCF Research Foundation
ACM SIGEVO

FOGA Supporters

www.parabon.com

www.tigerscience.com



Friday, January 9, 2008

Unless otherwise specified, events will be held in Partnership II.

8:30 am -- 4:00 pm	Registration
9:00 am -- 9:20 am	Welcome presentation
9:20 am -- 10:40 am	Keynote speaker: Prof. Kurt Mehlhorn Max-Planck-Institut für Informatik
10:40 am -- 11:00 am	Coffee break
11:00 am -- 12:00 pm	**On the Size of Weights in Randomized Search Heuristics** *Joachim Reichel and Martin Skutella*
12:00 pm -- 1:00 pm	Lunch
1:00 pm -- 2:00 pm	**On the Utility of the Population Size for Inversely Fitness Proportional Mutation Rates** *Christine Zarges*
2:00 pm -- 3:00 pm	**Why Standard Particle Swarm Optimisers Elude a Theoretical Runtime Analysis** *Carsten Witt*
3:00 pm -- 3:20 pm	Coffee break
3:20 pm -- 4:20 pm	**On the Impact of the Mutation-Selection Balance on the Runtime of Evolutionary Algorithms** *Per Kristian Lehre and Xin Yao*
4:20 pm -- 5:20 pm	**Analysis of a Simple Evolutionary Algorithm for the Multiobjective Shortest Path Problem** *Christian Horoba*
5:20 pm -- 6:30 pm	Break, walk to Progress Drive Building
6:30 pm -- 8:00 pm	Reception at Progress Drive Building

Keynote Presentation

Friday, January 9, 2009
9:20 am

Prof. Kurt Mehlhorn
Max-Planck-Institut für Informatik

Title:

Assigning Papers to Reviewers

Abstract:

CS conferences typically have a program committee (PC) that selects the papers for the conference from among the submitted papers. The work of the PC is supported by a conference support system, e.g., EasyChair. It is the task of the program chair to assign the papers to the members of the PC. In order to achieve an effective assignment, the PC members classify the papers according to interest. The EasyChair conference system knows four levels: strongly interested, weakly interested, not interested, conflict of interest. Given the classification of the papers by the PC members, the chair seeks a good assignment. What are the right objectives? Here are some: balancing the load of the PC members, making the task of the PC members worthwhile by assigning their high interest papers, guaranteeing each paper a sufficient number of reviews, guaranteeing each paper a sufficient total level of interest, and so on.

We have developed algorithms that compute assignments that satisfy well motivated criteria of load balance and fairness. We also obtained hardness results. I will discuss our results and present open problems.

Saturday, January 10, 2008

Unless otherwise specified, events will be held in Partnership II.

8:30 am -- 4:00 pm	Registration
9:00 am -- 10:00 am	**Free Lunches for Function and Program Induction** *Riccardo Poli, Mario Graff, and Nicholas Freitag McPhee*
10:00 am -- 10:20 am	Coffee break
10:20 am -- 11:20 am	**Unbiased Coevolutionary Solution Concepts** *Travis Service*
11:20 am -- 12:20 pm	**Monotonicity versus Performance in Co-optimization** *Elena Popovici and Kenneth De Jong*
12:20 pm -- 1:20 pm	Lunch
1:20 pm -- 2:20 pm	**Cooperative Coevolution and Univariate Estimation of Distribution Algorithms** *Christopher Vo, Liviu Panait, and Sean Luke*
2:20 pm -- 3:20 pm	**Stability of Learning Dynamics in Two-Agent, Imperfect-Information Games** *John M. Butterworth and Jonathan L. Shapiro*
3:20 pm -- 3:40 pm	Coffee break
3:40 pm -- 4:40 pm	**Black-box Search by Elimination of Fitness Functions** *Gautham Anil and R. Paul Wiegand*
4:40 pm -- 5:00 pm	Break
5:00 pm -- 6:00 pm	Trip to Kennedy Space Center
6:00 pm -- 9:00 pm	Banquet at Kennedy Space Center
9:00 pm -- 10:00 pm	Trip back to Orlando

Sunday, January 11, 2008

Unless otherwise specified, events will be held in Partnership II.

8:30 am -- 4:00 pm	Registration
9:00 am -- 10:00 am	**Single- and Multi-Objective Evolutionary Algorithms for Graph Bisectioning** *Gero Greiner*
10:00 am -- 10:20 am	Coffee break
10:20 am -- 11:20 am	**Additive Approximations of Pareto-Optimal Sets by Evolutionary Multi-Objective Algorithms** *Christian Horoba and Frank Neumann*
11:20 am -- 12:20 pm	**Theory of the Hypervolume Indicator: Optimal μ-Distributions and the Choice of the Reference Point** *Anne Auger, Johannes Bader, Dimo Brockhoff, and Eckart Zitzler*
12:20 pm -- 1:20 pm	Lunch
1:20 pm -- 2:20 pm	**Weighted Recombination Evolution Strategy on a class of PDQF's** *Steffen Finck and Hans-Georg Beyer*
2:20 pm -- 3:20 pm	**Don't Be Greedy When Calculating Hypervolume Contributions** *Karl Bringmann and Tobias Friedrich*
3:20 pm -- 3:40 pm	Coffee break
3:40 pm -- 4:40 pm	**Computing Single Source Shortest Paths using Single-Objective Fitness Functions** *Surender Baswana, Somenath Biswas, Benjamin Doerr, Tobias Friedrich, Piyush P. Kurur, and Frank Neumann*
4:40 pm -- 5:40 pm	**A Gaussian Random Field Model of Smooth Fitness Landscapes** *Alberto Moraglio and Yossi Borenstein*
5:40 pm -- 6:00 pm	Closing session

Local information

Conference location

Institute for Simulation and Training
Partnership II Building
3100 Technology Pkwy.
Orlando, FL 32826
407-882-1300
www.ist.ucf.edu

Directions to Partnership II available at http://www.ist.ucf.edu/visitors.htm

Hotel

La Quinta Inn & Suites Orlando UCF
11805 Research Parkway
Orlando, FL 32826
407-737-6075
http://www.lq.com/lq/properties/propertyProfile.do?ident=LQ180&propId=180

Map of Research Park