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
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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
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.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 am - 4:00 pm</td>
<td>Registration</td>
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| 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

Restaurants along University Blvd. and Collegiate Way

Progress Drive building

La Quinta Inn

Shuttle Route #5/#9 on campus stop (by the University Health Center)

Shuttle Route #9 stop (south end of Partnership II parking lot)