

FOGA 2000 - Program

Foundations of Genetic Algorithms Workshop
July 21-23, 2000
Charlottesville, VA

Friday, July 21
Breakfast 7:00 - 9:00

Session 1A - Invited Speaker 9:00 - 10:15 Friday, July 21

Can You Use a Population Size of a Million Million Million?
David H. Wood
Department of Computer and Information Sciences
University of Delaware

Paper Session 1B 10:45 - 12:00 Friday, July 21

Overcoming fitness barriers in multi-modal search spaces
M. Oates, D. Corne, R. Watson
British Telecom

Niches in NK-landscapes
Keith Mathias, Larry J. Eshelman, J. David Schaffer
Philips Research

Lunch 12:00 - 1:30

Paper Session 1C 1:30 - 2:45 Friday, July 21

New methods for tunable, random landscapes
R.E. Smith, J.E. Smith
University of The West of England

Analysis of recombinative algorithms on a non-separable building-block problem
Richard A. Watson
Brandeis University

Paper Session 1D 3:15 - 4:30 Friday, July 21

Direct statistical estimation of GA landscape properties
Colin R. Reeves
Coventry University

Comparing population mean curves
Bart Naudts, Ives Landrieu
University of Antwerpen

Saturday, July 22
Breakfast 7:00 - 8:30

Paper Session 2A 8:30 - 10:15 Saturday, July 22

Local performance of the (m/mI,L)-ES in a noisy environment
Dirk V. Arnold, Hans-Georg Beyer
University of Dortmund

Recursive conditional schema theorem convergence and population sizing in genetic algorithms
Riccardo Poli
University of Birmingham

Towards a theory of strong overgeneral classifiers
Tim Kovacs
University of Birmingham

Paper Session 2B 10:45 - 12:00 Saturday, July 22

Evolutionary optimization through PAC learning
Forbes J. Burkowski
University of Waterloo

Continuous dynamical system models of steady-state genetic algorithms
Alden H. Wright, Jonathan E. Rowe
University of Montana

Lunch 12:00 - 1:30

Paper Session 2C 1:30 - 2:45 Saturday, July 22

Mathematical framework for a mutation-selection algorithm

Paul Albuquerque, Christian Mazza

University of Geneva

Limiting distributions for mutation and recombination

William M. Spears

Artificial Intelligence Center NRL

Paper Session 2D 3:15 - 4:30 Saturday, July 22

The mixing rate of different crossover operators

Adam Prugel-Bennett

University of Southampton

Future Research Directions - FOGA Community Discussion

Discussion leader: Ken DeJong

George Mason University

Sunday, July 23

Breakfast 7:00 - 8:30

Paper Session 3A 8:30 - 10:15 Sunday, July 23

Dynamic parameter control in simple evolutionary algorithms

Stefan Droste, Thomas Jansen, Ingo Wegener

University of Dortmund

High precision gray codes and convergence

Darrell Whitley, Larura Barbulescu, Jean-Paul Watson

Colorado State University

Burden and benefits of redundancy

Karsten Weicker, Nicole Weicker

University of Stuttgart

Session 3B 10:45 - 12:00 Sunday, July 23

Future of FOGA

Once and Future FOGA Chairs Panel

Lunch 12:00 - 1:30

FOGA adjourns

Monticello trip 1:30