

The 2004
Midstates Conference on Undergraduate Research in
Mathematics and Computer Science

Conference Program

MCURCSM'04 is supported by the GLCA and by the MAA NSF-RUMC Grant
DMS-0241090

Keynote Address:

9:30 - 10:10 Mark Guzdial, Department of Computer Science, Georgia Tech
University
Keynote Address

Session I: Languages and Software Engineering

10:10 - 10:30 Peter T. Kovacina, John Carroll University
Use of Aspect Oriented Programming on Swarm Algorithms

10:30 - 10:50 Andrew Hoffman, Denison University
Language Support for Reusable Software Components

Session II: Population Dynamics, Discrete Mathematics, and Grammars

11:00 - 11:20 Kaythi Soe, Denison University
Mathematical Modeling in Population Dynamics (discontinuous case)

11:20 - 11:40 David Brown, Ian Kelly, Colin Kern, Alex Lemann, Greg Sandstrom, Earlham College
Representing Multidimensional Trees

11:40 - 12:00 David Brown, Ian Kelly, Colin Kern, Alex Lemann, Greg Sandstrom, Earlham College
A CNF Transformation for Multidimensional Grammars

Lunch: 12:00 - 1:00

Session III: Artificial Intelligence

- 1:00 - 1:20 Blaine Hoffman, Denison University
Genetic Algorithms Applied to the Freeze Tag Problem
- 1:20 - 1:40 Dan Bucatanschi, Denison University
The Ant Colony System for the Freeze-Tag Problem
- 1:40 - 2:00 Morgan Bates, Sandy Mtandwa, Scott Theded, DePauw University; Jason Rush Wray, Hiram College
Anaphora Resolution in PARE, an Automatic Text Summarizer

Session IV: Networks

- 2:15 - 2:35 Emily Cocanower, Lake Forest College; Victor Replogle, Taylor University; Stephen Weaver, Millersville University; Carl P. Singer, DePauw University
Addressing Connection Loss in a Mobile, Wireless Environment
- 2:35 - 2:55 Nathan Schmidt, Thomas Bressoud, Denison University
Open Content Addressable Storage Expanded to Include Peer to Peer Networks

Wrap-up: 3:00 - 3:30