

Curriculum Vitae

Amy K. Hoover
School of EE and Computer Science
University of Central Florida

amy.hoover@gmail.com
<http://amykhoover.com>

EDUCATION

- Ph.D. Computer Science** University of Central Florida, In Progress
Advisor: Kenneth O. Stanley, School of Electrical Engineering and Computer Science.
Support: NSF Graduate Research Fellowship and UCF Trustees Doctoral Fellowship.
- B.S. Computer Science, with University Honors** University of Central Florida, 2009
Honors Thesis: NEAT Drummer: Computer-Generated Drum Tracks
Advisor: Kenneth O. Stanley, School of Electrical Engineering and Computer Science.
- B.S. Mathematics, with University Honors** University of Central Florida, 2009

PUBLICATIONS

- Amy K. Hoover and Kenneth O. Stanley. “Exploiting Functional Relationships in Musical Composition.” *Connection Science Special Issue on Music, Brain, & Cognition* **21**, 227–251 (2009).
- Amy K. Hoover, Michael P. Rosario, and Kenneth O. Stanley. “Scaffolding for Interactively Evolving Novel Drum Tracks for Existing Songs.” In Mario Giacobini et. al. (Editor), *Proceedings of the Sixth European Workshop on Evolutionary and Biologically Inspired Music, Sound, Art and Design (EvoMUSART 2008)*, pp. 412–422 (Springer, 2008).
Winner of the Best Paper Award.
(out of 31 submissions).

RESEARCH EXPERIENCE

- Graduate Researcher.** University of Central Florida, 2009-present
Advisor: Dr. Kenneth O. Stanley, School of Electrical Engineering and Computer Science.
- Undergraduate Honors Thesis.** University of Central Florida, 2008
Title: NEAT Drummer: Computer-Generated Drum Tracks
Advisor: Dr. Kenneth O. Stanley, School of Electrical Engineering and Computer Science.
- Undergraduate Researcher.** University of Central Florida, 2007-2009
Advisor: Dr. Kenneth O. Stanley, School of Electrical Engineering and Computer Science.
- NSF REU in Machine Learning.** University of Central Florida, 2007
NEAT Drummer: Interactive Evolutionary Computation for Drum Pattern Generation
Advisors: Dr. Kenneth O. Stanley, Dr. Michael Georgiopoulos, School of Electrical Engineering and Computer Science.
- Undergraduate Lab Assistant.** University of Central Florida, 2004-2005
Isolated DNA, sequenced *Agkistrodon piscivorus* (cottonmouth) mitochondrial DNA
Advisor: Dr. Christopher L. Parkinson, Department of Biology.

POSTERS

- Showcase of Undergraduate Research Excellence.** University of Central Florida, 2008
Title: Automatically Generating Drum Tracks for Existing Songs with a Computer
Advisor: Kenneth O. Stanley, School of Electrical Engineering and Computer Science.
1st place in Physical Sciences, Mathematics, Computer Science and Engineering.
(out of 30 submissions)
- Showcase of Undergraduate Research Excellence.** University of Central Florida, 2005
Title: Snake Mitochondrial Genomics
Faculty Lab Advisor: Christopher L. Parkinson, Department of Biology.

PATENTS PENDING

Pending. Amy K. Hoover, Michael Rosario, and Kenneth O. Stanley (Patent Pending since July, 2008).
System and Method for Evolving Music Tracks. University of Central Florida

TEACHING EXPERIENCE

Undergraduate Teaching Assistant. University of Central Florida, 2008
Course: Introduction to Artificial Intelligence and Neuroevolution
Designed and taught a course on artificial intelligence to specially selected high school students in the Burnett Honors College Summer Institute
Instructor: Arup Guha, School of Electrical Engineering and Computer Science.

Undergraduate Teaching Assistant. University of Central Florida, 2007
Course: Intermediate Java
Instructor: Arup Guha, School of Electrical Engineering and Computer Science.

Mathlab Tutor. University of Central Florida, 2004-2006
Tutored students in the following subject areas: Finite Mathematics, Trigonometry, Geometry, College Algebra, Calculus, Differential Equations

HONORS AND AWARDS

2010	Grace Hopper Celebration of Women in Computing Scholarship
2010	National Science Foundation Graduate Research Fellowship
2009	Upsilon Pi Epsilon Jim Nolen Scholarship
2009	UCF Trustees Doctoral Fellowship
2009	Best Undergraduate Student Award in Computer Science
2008	Order of the Pegasus Award Nomination by EECS
2008	Showcase of Undergraduate Research, 1st place in Physical Sciences, Mathematics, Computer Science and Engineering (out of 30)
2008	Winner of Best Paper Award, EvoMUSART (out of 31)
2007	Upsilon Pi Epsilon: Computer Science Honors Society (2007 - present)

MEMBERSHIPS

Women in Electrical Engineering and Computer Science. University of Central Florida, 2008 - present

Evolutionary Complexity Lab. University of Central Florida, 2007-present

Association of Computing Machinery. University of Central Florida, 2007 - 2009
Position: ACM at UCF President 2007-2008

Upsilon Pi Epsilon: Computer Science Honors Society University of Central Florida, 2007 -present
Position: Secretary Spring 2009