

**CURRICULUM VITAE**  
**Charles Timothy Hardin**

**CONTACT INFORMATION**

Department of Computer Engineering and Computer Science  
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**PERSONAL DATA**

Date of Birth: September 25, 1951  
Place of Birth: Ardmore, OK  
Citizenship: U.S.

**ACADEMIC TRAINING**

University of Louisville, Ph.D. (December 2005 or May 2006) Computer Science and Engineering. Dissertation Working Title: "Application of Ethological Concepts to Optimization and Search Algorithms". Advisor: Adel Elmaghraby

University of Louisville, M.S., Computer Engineering and Computer Science, 2003.

University of Oklahoma, B.S., Industrial Engineering, 1974.

**TEACHING EXPERIENCE**

Spring 2005: CECS 622 - Simulation of Discrete Systems, Speed School of Engineering, University of Louisville. Graduate Teaching Assistant in charge of all programming team projects. (35 students)

Spring 2005: CECS 230 - Introduction to Computer Science and Computer Engineering, Speed School of Engineering, University of Louisville. Instructor. (48 students)

Fall 2004: CECS 230 - Introduction to Computer Science and Computer Engineering, Speed School of Engineering, University of Louisville. Graduate Teaching Assistant and Lab Instructor. (39 students)

Summer 2004: CECS 230 – Introduction to Computer Science and Computer Engineering, Speed School of Engineering, University of Louisville. Graduate Teaching Assistant in charge of student team projects. (24 students)

Spring 2004: CECS 230 – Introduction to Computer Science and Computer Engineering, Speed School of Engineering, University of Louisville. Instructor. (35 students)

Fall 2003: CECS 230 – Introduction to Computer Science and Computer Engineering, Speed School of Engineering, University of Louisville. Instructor. (41 students)

Spring 2003: CECS 230 – Introduction to Computer Science and Computer Engineering, Speed School of Engineering, University of Louisville. Instructor. (24 students)

## **INSTRUCTIONAL DEVELOPMENT**

May 2005: Certificate – Future Professor’s Program, School of Education, University of Louisville.

Fall 2004: College Teaching course, School of Education, University of Louisville. Term paper: "Design and Implementation of a Team Project for CECS 622 – Discrete Event Simulation".

Fall 2003: Redesigned CECS 230 course content to include weekly computer labs and a team-programming project.

## **PUBLICATIONS**

### **Conference Proceedings:**

X. Cui, C. T. Hardin, R. K. Ragade, and A. S. Elmaghraby, "A Swarm Approach for Emission Sources Localization," in *Proc. IEEE International Conference on Tools with Artificial Intelligence*, Boca Raton, FL, December 2004, pp. 424-430.

X. Cui, C. T. Hardin, R. K. Ragade, and A. S. Elmaghraby, "A Swarm-based Fuzzy Logic Control Mobile Sensor Network for Hazardous Contaminants Localization," in *Proc. IEEE International Conference on Mobile Ad-hoc and Sensor Systems*, Ft. Lauderdale, FL, November 2004, pp. 194-203.

C. T. Hardin, X. Cui, R. K. Ragade, J. H. Graham, and A. S. Elmaghraby, "A Modified Particle Swarm Algorithm for Robotic Mapping of Hazardous Environments," in *Proc. World Automation Congress, WAC'04*, Seville, Spain, June 2004. ISBN 1-889335-20-7

**Conference Presentations Accepted:**

J. Wolfe and C. T. Hardin, "Assigning team projects: problems, pitfalls, and solutions," Technical Symposium on Computer Science Education – SIGCSE'05. St. Louis, MO, February 2005.

**Conference Presentations Submitted:**

C. T. Hardin, J. S. Usher, "Facility Layout Using Swarm Intelligence", Swarm Intelligence Symposium, Pasadena, CA, June 2005.

C. T. Hardin, E. C. Rouchka, "DNA Motif Detection Using Particle Swarm Optimization and Expectation-Maximization," Swarm Intelligence Symposium, Pasadena, CA, June 2005.

X. Cui, C. T. Hardin, R. K. Ragade, T. E. Potok, A. S. Elmaghraby, "Tracking Non-stationary Optimal Solution by Particle Swarm Optimizer," 6th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing, Towson, MD, May 2005.

**Poster Presentations:**

M. R. Mysore, C. T. Hardin, and et al, "Multicenter Evaluation of www.picucourse.org, a Web-Based Core Curriculum and End-of-PICU Rotation Resident Examination," Society of Critical Care Medicine Annual Congress, Orlando, FL, February 2004.

**PROFESSIONAL ORGANIZATIONS AND SOCIETIES**

Association of Computing Machinery (ACM)  
Institute of Electrical and Electronic Engineers (IEEE)  
IEEE Computer Society  
Upsilon Pi Epsilon Honor Society

**PROFESSIONAL REGISTRATION**

Professional Engineer, State of Tennessee, License #15175, Expiration: July 2005.

**ACADEMIC AND OTHER PROFESSIONAL APPOINTMENTS**

August 2003 - Present

Lecturer / Graduate Teaching Assistant  
Department of Computer Engineering and Computer Science  
University of Louisville

January 2003 – April 2003  
Lecturer  
Department of Computer Engineering and Computer Science  
University of Louisville

November 1989 – October 2001  
Vice President and co-owner  
BLW Group, Inc., Memphis, TN

November 1983 – October 1989  
Vice President - Accounts  
PaineWebber, Inc., Memphis, TN

May 1981 – October 1983  
Manager – Sales Engineering  
Bauermeister, Inc., Memphis, TN

January 1979 – October 1980  
Industrial Engineer  
Federal Express Corp., Memphis, TN

June 1974 – December 1978  
Industrial Engineer  
Trans World Airlines, Kansas City, MO

## RESEARCH PROJECTS

May 2004 – December 2004  
Army Captain's Career Course (AC3) Distance Learning. Multimedia  
Team Supervisor, PI: Carolyn Rude-Parkins.

October 2003 – December 2003  
Vertical Conveyor Decision Support System. Industrial contract funded  
by Vertical Systems, Inc. Multimedia developer. PI: Mickey Wilhelm and  
Adel Elmaghraby.

## HONORS

Outstanding Master of Science Graduate, CECS Department, Speed School of  
Engineering, 2004.

E-Days, Speed School of Engineering, 2<sup>nd</sup> Place Project, "A Windows™-Based  
Interface for a Radio Controlled Airplane."

## UNIVERSITY SERVICE

Speed School Instruction and Learning Committee to create a freshman engineering design course. Member beginning February 2005.

## COMMUNITY SERVICE

Germantown Arts Alliance, Germantown, TN  
Community Advisory Member 1998-2001

Germantown Community Theatre, Germantown, TN  
Board of Directors (1990-97)  
President (1995-96)

Alliance for the Blind and Visually Impaired, Memphis, TN  
Board of Directors (1986-1992)  
President (1989-1990)

## REFERENCES

Dr. Adel Elmaghraby, Chair, Department of Computer Engineering and Computer Science, University of Louisville, Louisville, KY 40292.  
Ph: 502-852-0470.

Dr. James Graham, Professor, Department of Computer Engineering and Computer Science, university of Louisville, Louisville, KY 40292.  
Ph: 502-852-0475.

Dr. John Usher, Professor, Department of Industrial Engineering, University of Louisville, Louisville, KY 40292. Ph: 502-852-0085.