

- **(Spring 2007) Development of an optimal strategy for playing craps**
  - Used machine learning techniques (i.e. neural networks, decision trees, and support vector machines) to outline an optimal betting strategy for the non-deterministic game of craps
- **(Spring 2006) Parallelization of the Bellman equation**
  - Parallelized the Bellman equation (used to solve Markov Decision Processes) using MPI over several processors resulting in a significant speedup
- **(Spring 2006) SWS Challenge II**
  - Aided in developing process mediator using planning and interaction protocols
  - Project page: <http://lsdis.cs.uga.edu/projects/meteor-s/index.php?page=4>
- **(Fall 2005) Robotics Mini-DARPA project**
  - Participated in developing a small scale autonomous mobile robot in the spirit of the annual DARPA challenge and deployed the robot over a small obstacle course successfully
    - Picture - [http://www.cs.uga.edu/~potter/robotics/robopics\\_files/fall05-9.JPG](http://www.cs.uga.edu/~potter/robotics/robopics_files/fall05-9.JPG)
- **(Fall 2004 – Fall 2005) XML data integration (Master's thesis)**
  - Enhanced a methodology for querying multiple heterogeneous xml data sources by optimizing joins

## Teaching Experience

### Lead Instructor

*CSCI1301, Introduction to Java Programming*  
*CSCI1301, Introduction to Java Programming*  
*CS220A, Introduction to C++ Programming*

*University of Georgia, Athens, GA, 01/08-5/08*  
*University of Georgia, Athens, GA, 08/07-12/07*  
*Greensboro College, Greensboro, NC, 01/03-06/03*

### Teaching Assistant

*CSCI1100, Introduction to Computer Applications – Lab Instructor*  
*CSCI4550/6550, Introduction to AI – Grader*  
*CSCI1301, Introduction to Java Programming – Lab Instructor*  
*CS471/671, Principles of Database Systems – Lab Instructor/Grader*

*University of Georgia, Athens, GA, 08/08 – 12/08*  
*University of Georgia, Athens, GA, 08/08 – 12/08*  
*University of Georgia, Athens, GA, 05/08-7/08*  
*University of North Carolina-Greensboro, Greensboro, NC, 08/03-06/05*

## Professional Service

**Publicity Chair and Webmaster:** WSCA Workshop, IEEE International Conference on Services Computing (WSCA-SCC09) – <http://www.cs.uga.edu/~jfh/WSCA2009> (under construction)

**Publicity Chair and Webmaster:** WSCA Workshop, IEEE International Conference on Services Computing (WSCA-SCC08) – <http://www.cs.uga.edu/~jfh/WSCA2008>