

Larry A. Hendrix

2211 Woodview Court Apt #8
Madison, WI 53713
lhendrix@cs.wisc.edu
214.336.3850

RESEARCH INTERESTS

Algorithms in machine learning and data mining and their application to biomedical data.

EDUCATION

Fall 2006-Present **Univ. of Wisconsin-Madison** **Madison, WI**
PhD in Computer Science expected 2011

- NLM CIBM Predoctoral traineeship (Fall 2007- present)
- Advanced Opportunity Fellow (2006-2007)

Fall 2006-Fall 2008 **Univ. of Wisconsin-Madison** **Madison, WI**
M.S. in Computer Science (December 21, 2008)

- Coursework: CS540 Intro to Artificial Intelligence, CS552 Intro to Computer Architecture, CS576 Intro to Bioinformatics, CS 740 Advanced Computer Networks, CS760 Machine Learning, CS776 Advanced Bioinformatics, CS769 Advanced Natural Language Processing

Fall 2002-2006 **Grambling State University Grambling, LA**
B.S. in Computer Science (May 21, 2006)

- Graduated Magna Cum Laude; GPA: 3.75 /4.0 Major GPA: 3.51/4.0
- President's List (2003-3006)
- NIH-MARC Scholar (2004-2006)

RESEARCH EXPERIENCE

Summer 2006 **Georgia Institute of Technology** **Atlanta, GA**
Research Internship in Electrical and Computer Engineering

- Assisted in developing a model of the Port of Savannah using a java based rendering engine in order to improve organizational workflow of the port
- Created 3-dimensional representation of objects within the port using Google Sketchup 3D

Summer 2005 **Massachusetts Institute of Technology** **Cambridge, MA**
Research Internship in Computational Biology

- Analyzed high throughput data sets representing coiled-coil interactions within *Saccharomyces cerevisiae* (budding yeast) using MySQL query language and Perl scripting language

- Identified high confidence coiled-coil interactions to locate patterns within the data sets resulting in a decreased test set from 6 billion potential interactions to 618 high confidence coiled-coil interactions

Summer 2004 Univ. of Wisconsin-Madison Madison, WI

Research Internship in Bioinformatics/ Biostatistics

- Modeled different conformations (3-D molecular structures) of 100 compounds using a molecular modeling software, Sybyl, for the purpose of training the machine learning algorithm
- Estimated an inductive logic program's accuracy when generating logic clauses in Prolog on conformational/structural properties of molecules using 5-fold cross validation
- Analyzed logic clauses developed by the ALEH system that performed at a level of 57.5% accuracy which is does not show statistical significance over random chance

TEACHING EXPERIENCE

Summer 2007/2008 PEOPLE Program Univ. of Wisconsin-Madison

- Served as the Instructor/Internship Coordinator for a six-week program aimed at teaching high school seniors to program in Java.
- Strategically provided the students with an introduction to topics such as: Software Engineering, Computer Graphics, Computer Networks, Human-Computer Interaction, and Artificial Intelligence.
- Organized a course curriculum and syllabus, key point lectures, and assisted students in the lab with programming assignments.
- **Results:** students were able to write simple programs in Java and identify the general principles within subfields of Computer Science

TECHNICAL SKILLS

- Proficient in Java, SQL
- Experience with C++, Perl, MS Access, HTML, CSS
- Platforms: Linux/Unix , Solaris, Windows, Mac OS X