

SHAWN O'NEIL

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Objective

- To find an internship which allows me to further explore the areas of inventory management and applied online algorithms.

Education

- **University of Notre Dame**—South Bend, IN
M.S., Computer Science and Engineering. GPA 3.95/4.0
 - Expected M.S. Completion: December, 2008
 - Thesis: *Expert Advice and the Newsvendor Problem*
- **Northern Michigan University**—Marquette, MI
B.S., Computer Science. GPA 3.9/4.0
 - Minor: Mathematics
 - Graduated Summa Cum Laude May, 2005

Publications

- Shawn O'Neil, Amitabh Chaudhary. *Comparing Online Learning Algorithms to Stochastic Approaches for the Multi-Period Newsvendor Problem*. Proceedings of the Ninth Workshop on Algorithm Engineering and Experiments (ALENEX), 2008.

Research Interests

- Algorithmic and data mining approaches for inventory management problems.
- Robust algorithmic approaches for online financial problems: Two way trading, one way trading, portfolio selection.

Technical Skills

- **Programming Languages:** Java (Primary), Ruby (Recently), PHP, C++
- **Analysis/Tools:** Matlab, Mathematica, Gnuplot
- Linux/Unix Administration (Gentoo,FreeBSD), grep, sed, regex

Class Projects

- **Cryptography**—Web Based Digital Cash Service
 - Designed a digital cash bank as a web based service using php, mysql, ruby, and command line utilities such as wget. RSA signed cash was steganographically embedded in user supplied jpegs for easy transfer.
- **Graduate Operating Systems**—Adaptive Parallelism
 - Examined methods for dynamically adjusting the amount of concurrence used in parallel systems to maximize throughput.
- **Artificial Intelligence**—Learning Utilities of Board States
 - Implemented a method of learning comparative board states for game playing in java. By playing large numbers of games against a smart adversary, the agent learned the comparative value of board states by example for use in mini-max search game playing.

Awards and Fellowships

- University of Notre Dame Arthur J. Schmitt Fellowship
- Northern Michigan University Merit Excellence Award
- State of Michigan Merit Award
- State of Michigan Competitive Scholarship

Experience

- **Amazon.com**—Seattle, WA
Internship, Software Development Engineer: May 2008 – August 2008
 - Supply chain optimization/inventory planning and control team.
 - Developed tools for visibility into Amazon.com's complex supply chain.
- **NMU Computer Help Desk**—Marquette, MI
Help Desk Assistant: September 2003 – May 2005
 - Extensive work troubleshooting Windows XP.
 - Face to face and over phone computer troubleshooting.
- **Huron Area Technical Center**—Bad Axe, MI
Technology Coordinator Assistant: July 2001 – September 2002
 - Secondary Education Center, IT staff.
 - Setting up new equipment: computers, printers, networking.
 - Fixing, upgrading, installing software and computer hardware.