Keith A. Johansen

614.563.7272 johansen.12@osu.edu keithjohansen.com 366 Gosfield Gate Rd Westerville OH 43081

Education

Ohio State University

Masters of Science in Computer Science & Engineering 2008 - Present
- Concentration in Machine Learning and High Performance Computing
- Passed Comprehensive Masters Exams Spring 2009
- 3.60 GPA

Bachelor of Science 2003-2008
- Economics: 3.50 Major GPA
- Political Science: 3.49 Major GPA
- Significant additional coursework in Mathematics, Statistics and Computer Science

Technical Course Work Summary

Numerical Methods	Parallel Computing	Data Mining
Artificial Intelligence	Machine Learning	Bayesian Analysis
Nonparamterics	Analysis of Algorithms	Computer Graphics
Operating Systems	Linear Algebra	Computer Architecture
Multivariate Statistics	Stochastic Processes	Statistical Computing

Technology Skills C/C++, MatLab/Octave, R, OpenMP, MPI, Java, C#, Linux, Unix, MS Windows, MS Excel, LaTeX, SQL, Maple, SVN

Current Research Interests
- Adaptation of machine learning techniques for high performance computing platforms.
- Advances in machine learning for time series prediction
- Application of machine learning to financial problems

Certifications

Chartered Financial Analyst Program 2007-Present
- Passed the Level I Exam in December 2007
- Sat for the Level II Exam in June 2009, results pending

Selected List of Projects

Kernel Methods on the GPU Spring 2009-Present
In Progress. Development of novel algorithm adaptations for the efficient training of Support Vector Machines and Regularized Least Squares Classifiers on the GPU using CUDA.

Hierarchical Bayesian Model for Portfolio Weight Selection Winter 2009
Applied hierarchical Bayesian models to estimate posterior predictive distributions of asset returns in order to choose appropriate portfolio weights.

Comparison of Parallel Algorithms for Support Vector Machines Winter 2009
Identified performance bottlenecks, and compared the speed and scalability of parallel algorithms for solving Support Vector Machine problems.

Cluster Analysis for Portfolio Diversification Autumn 2008
Employed clustering methods to diversify a portfolio.

Work Experience

Journal of Money, Credit, and Banking *Research Assistant*
Columbus OH Summer 2007
- Replicated and verified the statistical analyses of published manuscripts

Ohio Department of Job and Family Services *Web Application Development Intern*
Columbus OH Summers 2004-2006
- Performed basic web maintenance
- Created a set of classes in ASP to decrease development time of common tasks
- Developed, as part of a team, an enterprise wide application in C# to manage a complicated workflow

Extracurricular

Club TECH CORPS 2009
- Introduce elementary school students to MS Office, basic hardware, programming, and robotics