

# Kathleen Ericson

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## Education

*Colorado State University*, Fort Collins, CO

PhD in Computer Science, anticipated graduation-May 2014

GPA: 3.885

*Drexel University*, Philadelphia, PA

Bachelor of Science in Computer Science, June 2008

GPA: 3.47

## Awards

CSU Graduate Fellowship Award, 2008-present

2<sup>nd</sup> Place Drexel Engineering Senior Design Competition, 2008

1<sup>st</sup> Place Drexel Computer Science Senior Design Competition, 2008

Upsilon Pi Epsilon Inductee, 2007-present

Drexel Honors College, 2003-8

AJ Drexel Scholarship, 2003-8

## Publications

On the Support for Heterogeneous Languages in Cloud Runtimes. Masters Thesis, Nov 2010 Colorado State University. Advisor: Shrideep Pallickara.

K. Ericson, S. Pallickara. Adaptive Heterogeneous Language Support within a Cloud Runtime. (To appear) *Journal of Future Generation Computer Systems*. UCC Special Issue. Published by Elsevier.

K. Ericson, S. Pallickara, C. W. Anderson. Handwriting Recognition Using a Cloud Runtime. *Colorado Celebration of Women in Computing 2010*. Golden, USA. One of 8 selected for best paper award.

K. Ericson, S. Pallickara, et al. Analyzing Electroencephalograms Using Cloud Computing Techniques. *CloudCom 2010*. Indianapolis, USA. Best student paper award.

Kathleen Ericson and Shrideep Pallickara. "A Survey of Storage and Fault Tolerance Strategies Used in Cloud Computing". *Handbook of Cloud Computing*. Springer. 2010, pp137-158. ISBN: 978-1-4419-6523-3

## **Work Experience**

### **Java Programmer**

Drexel iSchool – CAMRA, Philadelphia, PA

March 2007 – June 2008

- Worked to update CAMRA repository from PHP to Java
- Performed maintenance on PHP version of website
- Helped to design and test custom search algorithms

### **Software Development Intern**

Avencia, Philadelphia, PA

September 2006 to March 2007

- Worked with another developer to create a 'Shopping Cart' feature for a Property Acquisition web application created for the City of Philadelphia
- Designed Oracle Tables to handle 'Shopping Cart' features
- Used the GoogleMaps API to create a JavaScript based web application to track violent crimes among teens in the Philadelphia area

### **Software Engineer**

Unisys, Malvern, PA

September 2005 to March 2006

- Worked with a team to create a Visual Studio 2005 plug-in
- Developed sample projects to display the plug-in's features
- Integrated custom help files into Visual Studio 2005 IDE

### **Server Technician**

Wyeth Pharmaceuticals, Frazer, PA

October 2004 to March 2005

- Responsible for building and maintaining Windows Servers (NT, 2000, 2000 Advanced, 2003)
- Configured and built Itanium and Stratus Servers
- Responsible for proper functioning of Tivoli Backup Software, Cristie Bare Machine Recovery, and Autosys Scheduler
- Wrote and revised Work Instructions for installing software and test scripts to ensure software was properly installed
- Scheduled backups using ArcServe
- Designed web interface for database of managed servers

## **Research**

### **CSU – Graduate Research Assistant, Fort Collins, CO**

Spring 2010 – present

- Worked with Granules cloud computing environment extensively
- Developed multi-language bridge

### **NCAR – CISL SIParCS Summer Internship, Boulder, CO**

SIParCS Summer Intern

- Explored parameters for the Parallel I/O (PIO) library
- Developed C code to search the parameter space for optimal configurations

- Worked with GPFS and Lustre file systems to assess impact on PIO

**CSU – PIES Research Project**, Fort Collins, CO

Graduate Assistant, June 2008 – June 2009

- Developed C code to compute the average parallelism of moldyn data sets
- Worked with local high school teachers to create Molecular Workbench worksheets
- Implemented the Barnes-Hut algorithm in Molecular Workbench

**Teaching**

**CSU – GTA**

- CS160 – Foundations in Programming, Spring 2009, Fall 2009
- CS270 – Computer Organization, Fall 2009
- CS454 – Principles of Programming Languages, Spring 2009
- CT320 – Unix Administration, Fall 2008

**Computer Skills**

**Operating Systems:** Windows 2000, XP Pro, Vista; Windows Server 2003; OS X; Fedora; Ubuntu

**Software:** Microsoft Office 2000, XP Pro, 2003, 2004, 2007; Scientific Workplace; Dia; Matlab; Maple

**Programming:** C, C++, C#, Visual Basic .NET, Java, Python, Perl, R