

## Overview

- ° Subject Matter Expert in High Speed, Research, and Grid Computing with wide use across the University. My job duties currently include a significant role in developing technology plans for the future. The Grid consists of over 4,000 CPU cores and growing. Researcher's computational jobs may be completed in as little as a few days on the Grid compared to over a year on their own equipment.
- ° Administration of the Grid requires interaction with other employees throughout the University including but not limited to those administering campus networking, LDAP directory, Zimbra e-mail, security, and Veritas NetBackup.
- ° Successfully completed and passed the hands on RHCE (RedHat Certified Systems Engineer) 3.0 through 6.0 exams proving my knowledge in RedHat based Enterprise Linux systems.
- ° Participate in user groups bringing together other universities throughout the world. This allows for quick resolutions to bleeding edge hardware and software issues which arise that would otherwise be close to impossible to solve in a reasonable amount of time. I use my extensive knowledge to resolve even the most unusual problems that arise in Grid Computing typically without any aid within the university.
- ° There are currently two full time staff and a professional technician working under my supervision to assist with grid support and to design, create, and post documentation on the departmental website.

## Objective

- ° Lead in all aspects of the campus-wide Grid including but not limited to planning, acquisition, installation, configuration, upgrading, troubleshooting, and development of plans for future direction of the WSU Campus Grid. Interface with staff and faculty throughout campus, vendors, and other universities to build and maintain the working computing environment.
- ° Research and develop emerging technology for future advancement of the WSU Grid and other enterprise systems at WSU. Plan and implement experimental and production software such as RedHat Linux, Ganglia, Altair PBS Pro and specialized requirements of high performance computing users by engaging in online forums, training, conferences, and user discussions.
- ° Develop and provide project plans for integrating high performance computing systems at WSU with critical infrastructure applications and services such as LDAP, firewall security, Veritas NetBackup, and system monitoring and notification.
- ° Provide onsite systems and application level support for the Advanced Computing Environment 24 hours a day, seven days a week such as assisting researchers, faculty, and staff with advanced programming concepts related to scientific research and academic curriculum. Provide leadership, consulting, and guidance to other supporters of the WSU Campus Grid.
- ° Consult with other departments throughout WSU to evaluate, recommend, acquire, install, and support servers, storage, operating systems, middleware, and utilities not directly relating to the WSU Campus Grid.
- ° Consult and support other departments within C&IT providing subject matter expertise in areas including but not limited to both Linux and Microsoft based server operating systems, clustering, LDAP authentication integration, Blackberry Enterprise Server, Microsoft Exchange Server, and SQL server. Consult with departments outside C&IT guiding in the planning, purchase, and implementation of grant funded equipment relating to research computing.

## Employment History

2001-Current

### Wayne State University

Detroit, MI  
*Lead Systems Software  
Engineer*

- ◦ Lead in all aspects of the campus-wide Grid including but not limited to planning, acquisition, installation, configuration, upgrading, troubleshooting, and development of plans for future direction of the WSU Campus Grid.
- ◦ Interface with staff and faculty throughout campus, vendors, and other universities to build and maintain the working computing environment.
- ◦ Interface with Support, Network Operations, and Telecommunications to actualize a working computing environment.

2001-2001

### Ford Motor Company (Contracted by CDI)

Dearborn, MI  
*Integration Systems  
Engineer*

- ◦ Work directly with Sun, Microsoft, Dell, eRoom, and EMC2 to support the Global Intranet.
- ◦ Create standards for Ford's e-mail system.
- ◦ Wide range of Experience Integration with UNIX, HP, Netscape, and other foreign e-mail systems.
- ◦ Provide end user support for the current e-mail standard.

1997-2001

### Textron Fastening Systems

Troy, MI  
*PC Coordinator/E-Mail  
Administrator*

- ◦ Work directly with IBM, EDS, and AT&T to support the Global Intranet.
- ◦ Administration of multiple Microsoft Exchange Servers participating in a network of over thirty other Exchange Servers that make up 30,000+ recipients in the GAL
- ◦ Wide range of AS/400 Experience including remote controllers, terminals, ports, barcode printers, and hands on troubleshooting of these and many other devices.
- ◦ Provide training for future IS Staff and users on a one to one basis.

1994-1997

### Sy Draft Inc.

Lathrup Village, MI  
*Computer Technician*

- ◦ Maintain the customer base at Sy Draft
- ◦ Additional responsibilities include store management duties such as opening and closing the store, training other technicians, handling sales, managing inventory, and providing customer support for Windows-95, Windows-NT and all other current software products.

1990-1994

### Craig Computer Company

Bloomfield, MI  
*Computer Technician*

- ◦ Assembled the complete line of PC-Compatible computer systems for our customer base.
- ◦ Provided telephone and on-site customer support.
- ◦ Dealt directly with customers to answer a wide variety of questions.

## Education

2009 - 2013

### Wayne State University

Detroit, MI  
*Masters of Business  
Administration*

2007 - 2009

### Wayne State University

Detroit, MI  
*Masters of Science in  
Computer Science*

2001 - 2007

### Wayne State University

Detroit, MI  
*Bachelors of Science in  
Computer Technology in  
the college of Engineering*

1997 - 2001

### Oakland Community College

Royal Oak, MI

## Technical Capabilities

- ◦ Successfully implemented a Panasas 9 and 14 series parallel NFS disk backend supporting the WSU Grid over redundant 10gb links eliminating performance bottlenecks at the disk.
- ◦ Working with faculty to analyze their research computing needs including massively parallel and I/O intensive systems recommending optimal hardware configurations and assisting with the development of research grants to fund acquisition of new computing hardware.
- ◦ Project management
- ◦ Ability to create and maintain Web sites to educate and support users on Linux clusters, parallel programming, and Grid computing.
- ◦ Extensive knowledge of TCP/IP and UNIX network programming
- ◦ Maintain, and continually optimize a working job scheduler that can share jobs and resources across Linux, Sun Solaris, Windows, and MAC systems
- ◦ Extensive knowledge in windows clustering, planning, troubleshooting, and implementation.
- ◦ Develop PBS Pro operating on networked, multi-platform UNIX environments, including heterogeneous clusters of workstations, supercomputers, and massively parallel systems by collaborating with the vendor Altair Engineering.
- ◦ Extensive knowledge in software packages such as NPACI Rocks and PAM
- ◦ Knowledgeable in a large variety of programming languages such as Korn shell, Perl, Java, PHP, C++
- ◦ Develop, install, support, and maintain Linux Pluggable Authentication Modules (PAM) which integrate with WSU's LDAP (directory) and mail systems through a suite of shared libraries that determine how a user will be authenticated.
- ◦ Extensive knowledge of the Linux operating system, the ability to configure it and troubleshoot problems when they occur
- ◦ System architecture design
- ◦ Maintain and support local personnel in areas of desktop computing, networking, and application support