

# ALAN RITTER

---

625 N. Garden #101, Bellingham WA 98225

(360) 820-1090; [ritter.alan@gmail.com](mailto:ritter.alan@gmail.com)

## Objective

- Seeking a full-time job starting after December 2006

## Education

- **Bachelor of Science**—Computer Science  
*Western Washington University*
  - Minor in Mathematics
  - GPA: 4.00 (overall)
  - Graduation Date: December, 2005
- **Master of Science**—Computer Science  
*Western Washington University*
  - Projected Graduation Date: December 2006

## Areas of Interest

- Operating System Internals, Device Drivers, Distributed Operating Systems, Parallel Computation, Programming Languages/Compilers, Natural Language Processing

## Google Summer of Code Grant

- **Ported FreeBSD's NDIS Compatibility Layer and Driver to NetBSD**
  - Creates a NetBSD network driver from Windows .inf and .sys files
  - Extensive kernel-level programming
  - **Currently tested and working for two network cards**
    - \* Intel EtherExpress Pro/100
    - \* Dell (Broadcom) TrueMobile (NetBSD previously had no driver)
  - Article Published in January 2005 Issue of Doctor Dobbs Journal
  - Mentor/Professor: Phil Nelson ([phil@cc.wvu.edu](mailto:phil@cc.wvu.edu))
  - More info available at <http://netbsd-soc.sourceforge.net/projects/ndis/>
  - Recently imported into the NetBSD source tree
  - Currently a NetBSD developer (commit access)

## Programming Experience

- **Some examples of software I've written over the course of my studies:**
  - **Compiler for a block structured programming language**
    - \* Includes nested, and overloaded functions
    - \* Written in C using Lex and Yacc

- **UNIX shell**
  - \* Features include: pipes, backquotes, as well as *if* and *while* statements
- **Device Drivers**
  - \* **Analog to digital converter card (PCI-DAS08)**
    - Wrote drivers for both NetBSD and Windows XP
    - Wrote a graphical oscilloscope program using fltk to test the drivers
  - \* **Digital I/O board (PCI-DIO24)**
    - Wrote a driver for FreeBSD
    - Application software and wiring to control 7-segment display and LEDs

## Publications

- **Accepted**

- *J. Michael Meehan, Alan L. Ritter.* Tuning openMosix Load Balancing Parameters using a Genetic Algorithm, MFCSIT'06

- **Submitted**

- *Alan L. Ritter, James W. Hearne, Philip A. Nelson.* Distributional Word Clustering in Parallel, PDCS-2006 (Awaiting notification of acceptance)

## Employment

- **Graduate Teaching Assistantship, WWU (Spring/Fall, 2006)**

- Teaching an introductory programming lab
- Grading student programs

- **Grader, WWU (Winter, 2005)**

- Graded programming assignments

- **Internship, Naval Research Laboratory, Monterey CA (For summer 2006)**

- Will optimize Fortran MPI code for the Data Assimilation Section

## Skills

- **Operating Systems:** BSD, Linux, Windows 98/2000/XP/etc...

- **Programming Languages I have experience with:**

- C, C++, C#, i386 assembler, Common Lisp, Scheme, Lua, ML, Perl, Fortran, Ada

- **APIs with which I am familiar:**

- Win32, POSIX, Windows Forms/.NET, OpenGL, fltk, Lua C API, pthreads, MPI

- **Tools I enjoy using:**

- **UNIX tools:** Lex, Yacc, L<sup>A</sup>T<sub>E</sub>X, CVS/Subversion, Make, gcc, gdb, emacs, etc...
- **Windows:** Visual Studio .NET, MS Office, Visio, etc...

## Scholarships and Awards

- Departmental Tuition Waiver (2003-04)
- WWU Class of 2006 Outstanding Graduate in Computer Science