

# Jeffrey A. Turkstra

<b>Education</b>	<p><b><u>Purdue University – West Lafayette, IN</u></b></p> <p><b>Doctor of Philosophy Degree in Electrical and Computer Engineering (PhD) – May 2012</b> <b>Current GPA: 4.0</b></p> <ul style="list-style-type: none"><li>Major Professor: Dr. David G. Meyer</li><li>Thesis Topic: Virtual, Distributed Operating Systems</li></ul> <p><b>Master of Science Degree in Electrical and Computer Engineering (MSECE) – May 2007</b> <b>GPA: 3.5</b></p> <ul style="list-style-type: none"><li>Coursework Highlights: Operating Systems, Compilers, Computational Models and Methods, Computer Architecture, Parallel Computer Architecture, Advanced Computer Systems, Solid State Devices</li><li>Purdue University Charles C. Chappelle Fellow</li><li>2005-2006 Graduate Student Teaching Excellence Award Recipient</li><li>2004-2005 Magoon Award Recipient for Outstanding Teaching Assistant</li></ul> <p><b>Bachelor of Science Degree in Computer Engineering (BSCmpE) – May 2004</b> <b>GPA: 3.49</b></p> <ul style="list-style-type: none"><li>Coursework Highlights: Operating Systems, C Programming, Software Engineering, ASIC Design (using VHDL), Computer Design &amp; Prototyping, Microprocessor Systems &amp; Interfacing, Music Theory</li><li>Giles Morrill Memorial Scholarship Recipient</li><li>Dean's List (2 Semesters) and Semester Honors (4 Semesters)</li><li>Engineering Projects In Community Service (EPICS) Project Leader (August – December 2003)</li></ul>
<b>Work Experience</b>	<p><b><u>Purdue University – West Lafayette, IN</u></b></p> <p><b>Software Engineer – Rosen Center for Advanced Computing (RCAC) (06/2009 – present; 40 hours/week)</b></p> <ul style="list-style-type: none"><li>Manage infrastructure and computing resources including machines, software, and databases associated with nanoHUB and the HUBzero project</li><li>See following research assistant position</li></ul> <p><b>Research Assistant - Network for Computational Nanotechnology (NCN) (01/2008 – 06/2009; 20 hours/week)</b></p> <ul style="list-style-type: none"><li>Develop virtualization middleware for large, distributed computational systems</li><li>Involves extensive knowledge of the Linux kernel, systems programming, and architecture</li></ul> <p><b>Instructor - School of Electrical and Computer Engineering (08/2005 – 05/2008; 30 hours/week)</b></p> <ul style="list-style-type: none"><li>Autonomously managed classes of 30, 35, 38, 54, 55, and 92 students</li><li>Delivered anywhere from one (ECE 364) to four (ECE 264) lectures a week</li><li>Responsible for creation of all course related material (homework assignments, quizzes, lectures, and exams)</li><li>Supervised multiple graduate teaching assistants and undergraduate graders</li><li>Courses taught:<ul style="list-style-type: none"><li>Operating Systems Engineering, ECE 469 (4 credit hours) - Spring 2008</li><li>Software Engineering Tools, ECE 364 (1 credit hour) - Spring 2005, Fall 2006, Spring 2006, Spring 2007</li><li>Advanced C Programming, ECE 264 (2 credit hours) - Fall 2005</li></ul></li></ul> <p><b>Research Assistant - Engineering Computer Network (ECN) (08/2006 – 12/2007; 10 hours/week)</b></p> <ul style="list-style-type: none"><li>Assisted in the development and testing of storage area network (SAN)-related devices and firmware including:<ul style="list-style-type: none"><li>Sun StorEdge T3 Array, 3510, 3511, 3910, 6130, 6140, 6540, 6900, 6910, 6920; Brocade &amp; QLogic Switches; and Sun Fire V40z, V440, V880, E10K Servers</li><li>Software listed further below</li></ul></li></ul> <p><b>Research Assistant - Engineering Computer Network (ECN) (08/2004 – 08/2005; 30 hours/week)</b></p> <ul style="list-style-type: none"><li>Managed various aspects of a joint grid computing project between Sun Microsystems and Purdue University</li><li>Developed and implemented scripts enabling interoperability between ASIC design software and Sun's GridEngine</li><li>Collected and analyzed hardware usage data to evaluate effectiveness of GridEngine and Sun Ray Server software</li></ul>
<b>Software and Programming Experience</b>	<ul style="list-style-type: none"><li>C, C++, Fortran 90/95, Java, Python, PHP, SQL, Kornshell, Bash, git, CVS, RCS, HTML, CSS, Visual Basic</li><li>Apache, Bind, SSH, Samba, NFS, Sendmail, Cron, as well as numerous other *nix daemons</li><li>Fedora, RedHat Linux, Debian, FreeBSD, SunOS, Solaris, CDE, KDE, Gnome</li><li>Sun GridEngine, Sun Ray Server, Sun StorEdge SAN Foundation Software, Sun StoredgeTek Common Array Manager (CAM), Sun StorADE, Veritas Enterprise Administrator</li><li>VHDL, ModelSim SE Plus, Synopsys DC Shell, Silicon Ensemble, Cadence Virtuoso, PSpice, HSpice, Orcad Schematic, Orcad Capture</li><li>Extensive experience with all versions of Microsoft Windows, Office, and DOS</li></ul>
<b>Extracurricular Activities</b>	<p><b>Unreal Internet Relay Chat Daemon (UnrealIRCd) Head Coder (2001 – 2004)</b></p> <ul style="list-style-type: none"><li>Maintained the stable branch for an open source Linux daemon, patching newly discovered vulnerabilities, actively "backporting" features from the current development version, and making regular releases</li></ul> <p><b>Purdue Low Power VLSI Laboratory Undergraduate Research Assistant (08/2003 – 12/2003; 4 hrs/week)</b></p> <ul style="list-style-type: none"><li>Assisted in the development of low power SRAM cache, utilizing Cadence Virtuoso to perform transistor-level design of clock subsystem (implemented as a ring oscillator) as well as hSpice to simulate and test for errors</li></ul> <p><b>Purdue Pilots, Inc. Flying Club (2009 – present)</b></p> <p><b>Purdue Ski &amp; Snowboard Club (2004 – 2007)</b></p> <p><b>Purdue Skydiving Club (2006 – 2008)</b></p> <p><b>Purdue University Bands (2000 – 2008)</b></p> <ul style="list-style-type: none"><li>Leadership positions include Section Leader, Assistant Section Leader, and Operations Officer</li></ul>