

Jeffrey A. Turkstra

Education	<p><u>Purdue University – West Lafayette, IN</u></p> <p>Doctor of Philosophy Degree in Electrical and Computer Engineering (PhD) – May 2011 Current GPA: 4.0</p> <ul style="list-style-type: none">Major Professor: Dr. David G. MeyerThesis Topic: Virtual, Distributed Operating Systems <p>Master of Science Degree in Electrical and Computer Engineering (MSECE) – May 2007 GPA: 3.5</p> <ul style="list-style-type: none">Coursework Highlights: Operating Systems, Compilers, Computational Models and Methods, Computer Architecture, Parallel Computer Architecture, Advanced Computer Systems, Solid State DevicesPurdue University Charles C. Chappelle Fellow2005-2006 Graduate Student Teaching Excellence Award Recipient2004-2005 Magoon Award Recipient for Outstanding Teaching Assistant <p>Bachelor of Science Degree in Computer Engineering (BSCmpE) – May 2004 GPA: 3.49</p> <ul style="list-style-type: none">Coursework Highlights: Operating Systems, C Programming, Software Engineering, ASIC Design (using VHDL), Computer Design & Prototyping, Microprocessor Systems & Interfacing, Music TheoryGiles Morrill Memorial Scholarship RecipientDean's List (2 Semesters) and Semester Honors (4 Semesters)Engineering Projects In Community Service (EPICS) Project Leader (August – December 2003)
Work Experience	<p><u>Purdue University – West Lafayette, IN</u></p> <p>Research Assistant - Network for Computational Nanotechnology (NCN) (01/2008 – present; 20 hours/week)</p> <ul style="list-style-type: none">Develop virtualization middleware for large, distributed computational systemsInvolves extensive knowledge of the Linux kernel, systems programming, and architecture <p>Instructor - School of Electrical and Computer Engineering (08/2005 – 05/2008; 30 hours/week)</p> <ul style="list-style-type: none">Autonomously managed classes of 30, 35, 38, 54, 55, and 92 studentsDelivered anywhere from one (ECE 364) to four (ECE 264) lectures a weekResponsible for creation of all course related material (homework assignments, quizzes, lectures, and exams)Supervised multiple graduate teaching assistants and undergraduate gradersCourses taught:<ul style="list-style-type: none">Operating Systems Engineering, ECE 469 (4 credit hours) - Spring 2008Software Engineering Tools, ECE 364 (1 credit hour) - Spring 2005, Fall 2006, Spring 2006, Spring 2007Advanced C Programming, ECE 264 (2 credit hours) - Fall 2005 <p>Research Assistant - Engineering Computer Network (ECN) (08/2006 – 12/2007; 10 hours/week)</p> <ul style="list-style-type: none">Assisted in the development and testing of storage area network (SAN)-related devices and firmware including:<ul style="list-style-type: none">Sun StorEdge T3 Array, 3510, 3511, 3910, 6130, 6140, 6540, 6900, 6910, 6920; Brocade & QLogic Switches; and Sun Fire V40z, V440, V880, E10K ServersSoftware listed further below <p>Research Assistant - Engineering Computer Network (ECN) (08/2004 – 08/2005; 30 hours/week)</p> <ul style="list-style-type: none">Managed various aspects of a joint grid computing project between Sun Microsystems and Purdue UniversityDeveloped and implemented scripts enabling interoperability between ASIC design software and Sun's GridEngineCollected and analyzed hardware usage data to evaluate effectiveness of GridEngine and Sun Ray Server software <p>Teaching Assistant - School of Electrical and Computer Engineering (05/2002 – 05/2005; 10 hours/week)</p> <ul style="list-style-type: none">Similar to ECE 364 instructor position above, independently managing lab sections with 10-20 students
Software and Programming Experience	<ul style="list-style-type: none">C, C++, Fortran 90/95, Java, Python, PHP, SQL, Kornshell, Bash, git, CVS, RCS, HTML, CSS, Visual BasicApache, Bind, SSH, Samba, NFS, Sendmail, Cron, as well as numerous other *nix daemonsFedora, RedHat Linux, Debian, FreeBSD, SunOS, Solaris, CDE, KDE, GnomeSun GridEngine, Sun Ray Server, Sun StorEdge SAN Foundation Software, Sun StoredgeTek Common Array Manager (CAM), Sun StorADE, Veritas Enterprise AdministratorVHDL, ModelSim SE Plus, Synopsys DC Shell, Silicon Ensemble, Cadence Virtuoso, PSpice, HSpice, Orcad Schematic, Orcad CaptureExtensive experience with all versions of Microsoft Windows, Office, and DOS
Extracurricular Activities	<p>Unreal Internet Relay Chat Daemon (UnrealIRCd) Head Coder (2001 – 2004)</p> <ul style="list-style-type: none">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 <p>Purdue Low Power VLSI Laboratory Undergraduate Research Assistant (08/2003 – 12/2003; 4 hrs/week)</p> <ul style="list-style-type: none">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 <p>Purdue Ski & Snowboard Club (2004 – 2007)</p> <p>Purdue Skydiving Club (2006 – 2008)</p> <p>Purdue University Bands (2000 – 2008)</p> <ul style="list-style-type: none">Ensembles include Purdue "All-American" Marching Band, Basketball Pep Bands, and Concert BandLeadership positions include Section Leader, Assistant Section Leader, and Operations Officer