

# Timothy Bielawa

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**Website:**

<http://tbielawa.com>

## Skill Summary

Programming experience over eight years including: UNIX Shell, Python, PHP, Java, C and ANSI LISP.

Operating systems: Eight years experience with GNU/Linux, specialization in Debian/Ubuntu. Thirteen years experience with Microsoft Windows. Four years experience with Mac OS X.

Pursuing B.S. in Computer Science at West Virginia University, 4 years completed. Supporting courses include: Advanced Data Structures, Digital/Symbolic Logic, Software Engineering, Concepts of Programming Languages, The UNIX Operating System, Data Mining.

Other: Version Control Systems, Regular Expressions, DocBook XML, Debian Packaging, Emacs, LDAP.

## Professional History

**System Administrator**, WVU LCSEE Department, Sept 2007 - Dec 2009 (PT); Mar 2010 - Oct 2010 (FT)

Two years experience working as a system administrator and developer in a highly complex distributed infrastructure spanning Windows, Linux, and MacOS. Roles included maintaining, operating, and developing the department's Linux based computing infrastructure for classroom, research, and administrative use.

- Created QEMU/KVM virtualization system and lead efforts to virtualize all 40+ servers onto 18 virtual hosts. This resulted in cutting our footprint by more than half while more than doubling our server capacity.
- Wrote Shadm, a Python utility which has safely migrated the data of over 2000 user accounts between file servers. Functionality includes: batch processing mode, built in logging, automatic retrieval and updating of directory information, omni-directional syncing of NFS v3 and v4 servers.
- Monitored, upgraded, and maintained 3 shell servers and over 125 desktop machines used continuously for both labs and open computing.
- Created or maintained over 30 software packages used in server and desktop configurations. Each includes custom maintenance scripts for building, installing, upgrading and removing the package.
- Helped to create LOUD -- a customized version of Ubuntu Linux used on LCSEE lab machines and servers. Internally, LOUD is used as a fully automated provisioning system. Externally it provide students with an installable virtualized lab machine which contains all the custom coursework packages installed in the labs.

**Cable Installer**, Contractor for Kablelink Communications LLC., January 2005 through August 2005

Eight months experience working as a private contractor installing Cable Television, Internet, and Digital Voice over IP (VoIP) telephone systems. Responsible for installation and maintenance of all wires and equipment from tap to wall outlet.

Required responsible time management between jobs, strict record keeping, and the ability to make decisions unsupervised. Service extended to both business and private residential contracts. Received Outstanding New Installer Award due to my excellent professional conduct and customer relations as reported by satisfied customers.

## Other Activities

- Numerous bug reports, patches, and software enhancements to open source software projects. See website for an updated list of contributions and personal projects: <http://tbielawa.com/>
- WVU Free Software Group Founder & President (2008 - 2010)
- WVU IEEE Student Chapter President (Year of 2007)
- WVU Sierra Student Coalition: Volunteer as Technology Overseer (2007 - 2008)
- Aurora Lights Conservation: Volunteer as Technology Overseer (2007 - Present)
- Member of College and Department Student Advisory Councils (2007 -2009)
  
- View my code online at <https://github.com/tbielawa>