# Travis B. Hartwell

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## Skills Summary

* Programming Languages
  + *Experienced and Proficient*: Python, Java, bash scripting, C, Emacs Lisp
  + *Some experience*: Lua, SQL, Haskell, Common Lisp, Javascript, C++
* GUI development
  + *With Java*: SWT, Eclipse RCP, Swing
  + *In Python, C, Haskell*: Gtk and Gnome
* Network service development, particularly with Twisted in Python
* HTML and CSS
* System Administration
  + Extensive admin of Debian and Ubuntu. (*primary personal operating system for fifteen years*)
  + Debian packaging and some RPM packaging.
  + NixOS packaging and administration.
  + Some CentOS, RHEL, and Arch Linux admin and Linux administration in general.
* Extensive use and administration of git and Subversion.
* Some use of bzr, CVS, hg, and darcs.

## Professional Experience

### Independent Contractor, major clients and projects listed, primarily remote

*September 2006 to present*

* [**Binary Cocoa**](http://www.binarycocoa.com/), *December 2011 to September 2014*
  + Wrote AI player for [BOCO](http://www.bocogame.com/) in Lua.
  + Created Debian, Ubuntu, and Fedora packages for games for the Humble Bundle for Android, used by approximately 50,000 customers.
* [**Leading 2 Lean**](http://www.leading2lean.com/), *August 2011 to November 2011*
  + Updated and improved site deployment scripts for deploying from git.
  + Wrote web administrative interface for the deployment using Python and Django.
* [**Send Out Cards**](http://www.sendoutcards.com/), *May 2011 to August 2011*
  + Refactored, fixed bugs, and packaged software used to prepare all cards for printing (or *Pre-Press*).
  + Studied Scala and the Lift web framework to contribute to web interface for Pre-Press.
  + Supported team members in Linux and git use.
* [**NetRadius**](http://www.netradius.com/), *intermittent, as needed, September 2006 to November 2011*
  + Developed build and deployment process improvements for client's Java desktop application. Also fixed bugs in data export portion of application.
  + Implemented various JSP report screens and their back-end data objects for client web application.

### [Canonical USA](http://www.canonical.com/), remote

**Desktop Software Developer**, *February 2010 to May 2010*

* Started as a contractor, hired as full-time employee before contract was up.
* Added support to [Gnome](http://www.gnome.org/) applications (brasero, gnome-bluetooth, vino, and Gnome Control Center) for Ubuntu's application indicators, working with upstream Gnome developers to get patches reviewed and accepted.
* Tracked down reported application bugs by examining and fixing code from the application level through the Gnome stack including Gtk.
* Fixed show-stopping CPU usage issue in [Gwibber](http://www.gwibber.com/) by changing how Gnome Keyring was used with threading.

### [Mozy](http://www.mozy.com/), Pleasant Grove, Utah

**Senior System Administrator**, *November 2008 to October 2009*

* Developed automation tools to manage thousands of heterogeneous Debian servers and associated hardware. Tools were primarily client-server software written with the Twisted Asynchronous Python Networking framework.
* Administered thousands of Debian servers, as part of a team, handling day to day errors and maintenance as needed.

### Feature 50, Draper, Utah

**Senior Software Developer**, *February 2008 to August 2008*

* Cross-team support for a custom Java Swing grid component including: new features, bug fixes, and technical support.
* Improved manual test suite harness for grid component enabling easier reproduction of bugs and scenarios of production environments.
* Integrated support for generating editable JFormDesigner forms for dynamically generated Swing layouts.
* Increased efficiency and reliability of a JMS-based monitoring dashboard application. Provided system administration support for same application.

### [21st Century Technologies](http://www.21ct.com/), Austin, Texas

**Software Engineer**, *May 2006 to February 2008*

* Designed and developed general script execution system for the Lynxeon advanced analytics platform, integrating Jython and Enhydra Shark as execution engines. Wrote custom Jython import mechanism from JSR 170 content repository.
* Set up Maven 2 builds and other automation for team projects, including Bamboo automated build server and scripting to set up local Maven 2 mirror.
* Contributed compiler extensions for the Lynxeon Pattern Query Language to support new language constructs.
* Wrote extension of Postgis extras Tiger geocoder for international cities.
* Integrated uDig into Lynxeon Analyst Studio (an Eclipse RCP application), including custom data export dialogs and project synchronization.

### Roxor Games, Austin, Texas

**Systems Engineer**, *May 2004 to May 2006*

* Game Development Team Lead
  + Lead development of [Road Rebel](http://www.roadrebel.com/) arcade game implemented with the Torque Game Engine in C++ and Torque Script.
* Factory Workflow Automation
  + Increased factory production capacity 40 times through the design and implementation of a hardware and software system.
  + Designed and implemented software tools used for monitoring, quality control, and shipping preparation of arcade units.

## Open Source and Community Contributions

* Contributor to [Lowbrow](http://www.github.com/krainboltgreene/Lowbrow.app), a browser for development.
* Recent contributions of code, packages, and documentation to [NixOS](http://www.nixos.org) and [Spacemacs](http://www.github.com/syl30bnr/spacemacs).
* Contributed support, bug fixes, and documentation for the [Twisted](http://twistedmatrix.com) Project.
* All personal open source code and contributions can be found at <http://www.github.com/travisbhartwell/> and <http://www.gitlab.com/u/travisbhartwell>.

## Publications and Presentations

* Presented at PyCon DC 2004, “PyGtk and PyGnome Programming.”
* Gave extended version of PyGtk presentation at the 3rd USU Free Software and Linux Forum.
* Presented at PyCon DC 2003, “A Twisted Web Tutorial.”
* Taught in-depth workshops, “Beginning Emacs Editor Usage” and “Beginning Python Programming.”
* Gave various presentations, primarily around Python, at local user groups.
* Published code in colleague Marc Anderson's Master's thesis, “Adapting Minimum Temperature Forecasts to Fruit Orchards in the Intermountain West.”

## Education

Utah State University  
Computer Science, Fall 2003  
B.S., Science Emphasis with Mathematics minor