# David Wolever

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**About Me**

Around the internet I can be found at:

- Twitter: http://twitter.com/wolever
- GitHub: https://github.com/wolever
- StackOverflow: http://stackoverflow.com/users/71522/wolever
- LinkedIn: http://www.linkedin.com/in/wolever
- Reddit: http://www.reddit.com/user/wolever
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**Technical Skills**

**Like:** python, javascript, vim, gevent, postgresql, mercurial, redis

**Experience**

**Director** - *PyCon Canada* *2012 - Current*

*python email*

Organized Canada's first PyCon conference, PyCon Canada. As one of the three board members, my responsibilities vary wildly, from organizing volunteers and drumming up interest at local user groups, to printing stickers and pixel-fitting logos.

The 2012 conference, which had 275 attendees, has received unsolicited praise: "the best small conference I've attended", and "I can't wait to come back next year"!

In 2013, we hope to see almost 400 attendees.

Additionally, I was proud to serve as head of session staff at PyCon US 2013, where Mathieu and I were responsible for ensuring that — at the largest PyCon ever, with six tracks, 115 speakers, and 2,500 attendees — all of the speakers arrived at their talks prepared and on time. Many of the PyCon organizers were very impressed by my work, making comments like "I don't know where you found [David], but he was incredible".

**Freelance developer** *2012 - Current*

*python django javascript html postgresql*

As a part-time freelance developer, I use Python, Django, and PostgreSQL to develop web-related software for my customers. I take pride in the quality of both my work and my estimates, and consistently deliver on time and within budget.

**Principal software engineer** - *Luminautics Inc.* *January 2010 - July 2013*

*python gevent django postgresql javascript distributed-computing*

Lead development of the high-level software powering the Luminautics' large-format digital signage system. This includes the overall system architecture (many small services communicating through a message broker and RPC); browser-based HTML/JavaScript applications for media scheduling, management, and reporting; back-end services for real-time status monitoring, media management, transcoding, play reporting, and inventory tracking; and the software which runs on the screen's controller, including microsecond-accurate scheduling, fault-tolerant message buffering, and optimizations written in C where Python is too slow. My software has proven incredibly robust, with zero data loss and only two catastrophic bugs in the first year of operation.

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As one of two developers on this project, I designed and wrote approximately 15,000 lines of Python, and 10,000 lines of HTML/JavaScript/CSS. I designed and built the micro-service and messaging systems used both by our servers and the on-site display controllers (see also: dirt). My co-worker was responsible for developing the low-level software which runs on the screen controller and tile microcontrollers.

Our product can be seen at http://luminautics.com/

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**Technical logistics, mentor, instructor** - *Ladies Learning Code* *August 2011 - Current*

*wifi teaching mentorship*

Almost since their inception, I have volunteered with Ladies Learning Code: setting up the wifi network and power distribution at events (which frequently have 100 or more attendees), mentoring attendees at events (assisting them while they learn HTML, CSS, PHP, JavaScript, Python, Ruby, Wordpress, and other technologies), and I instructing a course which taught attendees how to get their own website hosted.

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**Lead software engineer** - *Verso* *2009 - 2012*

*python actionscript vrml cnc numpy furniture configurator django*

Lead development of an interactive furniture configurator which allows unskilled customers to customize every aspect (size, shape, color, style, material, etc) of cabinetry, then generates all the assets needed to efficiently construct that custom furniture (CNC machine code, purchase orders, etc).

I developed the core configurator (including the overall architecture, rule engine, undo/redo system, an innovative unit testing scheme, client/server framework and APIs, and portions of the user interface), which consisted of 20,000 lines of ActionScript, many application-specific Python libraries (including an innovative tool for generating furniture manufacturing instructions, and various 2D and 3D geometry manipulation libraries), plus portions of the client-facing website in Python, Django, and HTML/JavaScript/CSS.

Additionally, I developed a successful process for screening and interviewing developers.

This project has not yet been released.

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**Software Developer** - *CEFET Campos, Prof. Rogério Atem de Carvalho* *2008*

*python*

Created two open source Python-based web services to be used by the Brazilian Ministry of Education's service-oriented enterprise resource management system.

One of them, PyOLS, is still available, but the other is not.

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**Software Developer** - *University of Toronto, Prof. Greg Wilson* *2007*

*python http javascript html*

Enhanced and supported DrProject, a now-defunct project management portal based on Trac. As the sole full-time developer, I was responsible for most aspects of the project: user support, bugfixes, release management, testing, and new development.

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## Education

**Bachelor of Software Engineering** *2006 - 2009*

During my time at the University of Toronto I spent time in leadership positions with a number of different clubs and organizations, including the Computer Science Students Union (where, among other things, I organized a lecture by Richard Stallman, and secured sponsorship for our gaming events). I worked for two semesters under prof. Greg Wilson, and was the only person in my operating systems course to implement a complete shell.

I have not yet completed my degree. Two thirds of the way through I decided that it would be more interesting, enjoyable and profitable to become a professional developer (I haven't yet regretted that decision).

## Projects

**Stack Overflow**
stackoverflow.com/users/71522
*February 2009 - Current*

Written 618 answers. Active in javascript, python, html, django, sqlite and 24 other tags.

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**GitHub - pip2pi**
github.com/wolever/pip2pi
*December 2011 - March 2014*

*python packaging*

pip2pi builds a PyPI-compatible package repository from pip requirements

Developed `pip2pi` to guarantee that Luminautics can deploy its applications without depending on PyPI.

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**GitHub - remora**
github.com/wolever/remora
*December 2011 - January 2012*

*javascript client-side-templating node.js google-closure amd*

remora: less insane JavaScript templating

Developed Remora out of frustration with existing JavaScript-based templating languages. Works out-of-the-box with Node.js, Google Closure, AMD module systems, and vanilla web browsers.

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**GitHub - dirt**
github.com/Luminautics/dirt
*November 2012 - February 2013*

*python soa distributed-computing*

dirt is a comprehensive framework for building Python applications which are part of a service oriented architecture.

Designed and developed `dirt` while building the back-end control and reporting services at Luminautics.

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**GitHub - jquery-wakeful**
github.com/wolever/jquery-wakeful
*August 2011 - May 2012*

*javascript jquery*

A REST-aware RPC protocol and jQuery based client

Developed for Luminautics' to simplify RPC calls from the web browser.

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**GitHub - nose-parameterized**
github.com/wolever/nose-parameterized
*March 2012 - April 2014*

Nose decorator for parameterized testing

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**GitHub - heapset**
github.com/Luminautics/heapset
*August 2012 - March 2013*

A unique heap where items are ordered by score

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**GitHub - browsercast**
github.com/wolever/browsercast
*April 2013 - August 2013*

An IPython notebook plugin which facilitates lecture recording and playback.

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