

Resume of Richard T Jones

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Date of Birth: 30th April, 1972

Education

1989 Victorian Certificate of Education
1993 Bachelor of Computing (Digital Technology) with Honours
1994 Introductory Meteorology (Bureau of Meteorology)
1996 Basic and Advanced Java programming (Sun)
1997 Oracle 7 Administration (Oracle)
1997 Oracle 7 Fundamentals (Sequel)

Other Qualifications / Awards

1998 Oracle Certified Professional
2001 NaNoWriMo winner (50,000 word novel written in one month)
2002-2004 Completed four 48-hour game programming competitions. I ran the last two.
2003, 2004 Participated in Zope 3 development sprints.
2005, 2006 Organised and participated in Python Package Index (PyPI) sprints.
2005, 2006 Programme Chair for the Open Source Developers' Conference.
2005, 2006 Devised, ran and competed in three PyWeek game programming competitions.
Awarded first place, individual entry, in PyWeek #3.
Awarded third place, team entry, in PyWeek #1.
2006 Participated in the Python 2.5 optimisation *Need For Speed* development sprint in Reykjavik, Iceland.

Work Experience

1994-1998: Bureau of Meteorology

- 6 months in a position as a System Administrator doing Unix system administration with a little C coding.
- 12 months in a Development role coding system administration tools using C.
- 3 years as a Senior Developer, coding C in several projects ranging in length from 3 months to 2 years (with a smattering of Python). The final two-year archiving project was entirely mine to manage and develop.

1999-2000: Fulcrum Consulting Group

- 14 months as a Developer writing internal business and software development systems in a team of three.
- 9 months as a Senior Developer, heading up a team of three, developing a major new internal business system.

2000-2001: Bizar Software Pty Ltd (<http://www.bizarsoftware.com.au/>)

- 12 months Senior Developer writing online shop software in a team of three.

2001-2002: ekit.com Inc (<http://www.ekit.com/>)

- 12 months Senior Developer developing and maintaining a complex web and backend support system in a team of four.

2002-: Common Ground Publishing (<http://www.commonground.com.au/>)

- Senior Developer developing and maintaining a complex online content management and conferencing system in a team of two to four.

Technology Experience

Python

I have extensive experience with Python, beginning with hobby use since University and going on through my employment with Bizar Software, ekit.com and Common Ground. I am also active in the Python community, having developed several packages (e.g. the Roundup issue tracker) and more recently the Python Package Index (PEPs 243, 301, 314, 345). The systems I've worked on include:

- several PyQt-based applications, such as an ogg/mp3 player and home finance organiser
- several games and technology demonstrations using PyGame, PyOpenGL and PyODE
- credit card transaction system (several networked Unix daemons)
- SMS message transfer agent daemon
- report generation tools
- web unit testing tool with web-browser-like functions, DOM extraction and unittest-like functionality
- several open source projects (see below)
- Zope support code for Bizar Software, ekit.com and Common Ground
- collaborating on a new game engine using the new ctypes Python module

I participated (by invitation) in the 2006 Python 2.5 optimisation *Need For Speed* development sprint held in Reykjavik, Iceland. During the sprint I re-wrote Python's base exception classes to gain a 30% speedup.

I have attended several conferences including PyCon and EuroPython. I have been program chair for the Melbourne Open Source Developers' Conference which has a strong Python track.

I have a recipe in the 1st Edition Python Cookbook.

Zope, HTML, CSS and Javascript

Similarly to Python, I have experience working with Python Products and through-the-web technologies. I was active with the alpha and beta trials of Zope Page Templates.

I have been responsible for the creation of HTML pages, CSS stylesheets and Javascript code.

I have worked on:

- ground-up development of <http://www.cgpublisher.com/> online conference and publication environment (including a Javascript-based online program calendar editor for conferences)
- ground-up development of online store software (Bizar Shop) which was designed for box-on-shelf distribution
- many back-end (call centre and other intranet) and front-end (customer-visible) interfaces at ekit.com
- dev -> beta -> test -> production release and monitoring system
- patches and bug fixes for Zope itself
- simpler Zope installation systems for Windows, MacOS X and Linux
- call profile analysis tool (CallProfiler) and other Zope optimisation techniques
- Zope interface Products for reStructuredText and Roundup

C

Most recently I made modifications to the CPython interpreter code itself at the *Need For Speed* sprint.

I used C extensively at the Bureau of Meteorology and Bizar Software. The largest project I worked on catalogued the Bureau's satellite imagery and presented the meta-data to an international, interoperable network organised by the EOS "EOSDIS" project at NASA. This project included collaboration on the development of new Australian standards for satellite data archives with the

CSIRO. The resulting archive is accessed through:

<http://www.bom.gov.au/climate/satellite/archive/>

with the interesting information under "Storage Formats", then "ASDA Format" and "Tools". The EOS "EOSDIS" system is also accessible from the Archive main page.

At Bizar Software I developed a GUI (Carbon) Control Panel for Zope that gave novice users control over the Zope server process.

I have also developed several C-based Python extension modules, including a code obfuscation system for Bizar Software and several OpenGL helper modules for private projects.

Perl

Used at Fulcrum developing large applications, mostly with CGI front ends. I don't particularly enjoy working with Perl to develop large projects, but have written several. I do enjoy hacking with it. The work included:

- mapping of Fulcrum's business systems as software components and the entry of same into documentation system
- database and object design and coding of Perl modules for Project Management, Human Resource, Contacts, Ordering and Invoicing, Task Management and several other smaller components
- automatic generation of SQL schemas, Perl modules, Java source and E-R diagrams from the documentation system
- web-based software development documentation system

Java

Used for 9 months to develop complex front ends for the Contacts and Ordering and Invoicing systems at Fulcrum. They used the Swing toolkit and communicated via a customised XML-RPC to a Perl/CGI back end which held business logic and database interfaces. All development done on Unix with no IDE.

Sybase, Oracle, sqlite, gadfly, MySQL, PostgreSQL

I am not a DBA nor do I want to be one. I have done Oracle DBA courses and am an Oracle Certified Professional. I rate myself as pretty good at DB design.

Unix

I have written many systems that reside in a Unix environment (HPUX, SunOS, Solaris, Unicos, DGUX, Linux, and others). I am quite comfortable working in that environment. I know enough to keep my home Linux system running.

Personal Interests

Video games, programming, amateur photography, reading, board games, pen & paper role-playing, skiing, hiking, bike-riding, being a father.

Projects

These are the open source projects that I lead:

PyWeek Game Programming Challenge - <http://www.pyweek.org/>

PyWeek is a game programming challenge that I created. Entrants must write a game in a week using Python.

Roundup - <http://roundup.sf.net/>

Roundup is a simple to use and install issue-tracking system with command-line, web and e-mail interfaces. This is my largest open-source commitment as the software has an active user base and

fluctuating developer base.

PyPI - <http://cheeseshop.python.org/pypi>

The Python Package Index is an attempt to create a comprehensive catalog of third-party Python packages. The catalog is integrated with distutils and the registration interface is built into Python 2.3. Relevant PEPs are 243, 301, 314 and 345.

Python Task Planner - <http://www.mechanicalcat.net/tech/pytaskplan/>

A simple task planner capable of resource allocation (including one-of-many), milestones, interruptions (holidays, etc), HTML plan generation and HTML gantt chart generation.

Web Unit Testing Tool - <http://www.mechanicalcat.net/tech/webunit/>

Unit test your websites with code that acts like a web browser.

Bruce The Presentation Tool - <http://bruce.python-hosting.com/>

Bruce the Presentation Tool is for Python programmers who are tired of fighting with presentation tools.

Pyglet - <http://code.google.com/p/pyglet/>

Package for 2D and 3D games programming on Linux, Mac OS X and Windows. Developed to use native libraries only through ctypes.

Games that I have written solely or as a team-member:

Bouncy the Hungry Rabbit - <http://www.pyweek.org/e/bouncy/>

"Bouncy" came first in the individual rankings for the third PyWeek. As Bouncy the Hungry Rabbit you're in a garden with yummy veggies and a farmer who's not keen on you eating them. You can burrow under the ground. Bouncy was written so it could be enjoyed by my daughter, who was about to turn 3, and by older gamers. Hence it's not a violent game and "easy" is really, really easy, and "hard" is challenging.

POWER CORE - <http://www.mechanicalcat.net/tech/PyWeek/1/entrants/Uberteam>

POWER CORE is an arcade game that involves fighting off invading hordes of UFOs intent on blowing up your POWER COREs. This game came third in the team rankings during the first PyWeek.

Steam of the Colossus - <http://www.pyweek.org/e/richard/>

Quite a simple game that I spent about 25 hours on during the second PyWeek.

Ghosts - <http://www.mechanicalcat.net/tech/ld48/6/rj>

An LD48 entry working with the theme of "light and dark".

Ducks - <http://www.mechanicalcat.net/tech/ld48/home/richard>

An LD48 entry working with the theme of "random".

Projects I initiated which I take a continuing part in:

PyWebPerf - <http://sourceforge.net/projects/pywebperf/>

PyWebPerf is a performance measuring tool written in Python which simulates a web browser fetching a page (handles cookies, multiple threads, image and css download).

GadflyB5 - <http://gadfly.sourceforge.net/>

Gadfly is a simple SQL relational database system implemented in Python.

Zope CallProfiler - <http://www.zope.org/Members/richard/CallProfiler>

CallProfiler monitors the chain of DTML, ZSQL, ZPT, PythonMethod, PythonScript (and other) calls in a Zope request and gathers timing information, for the purpose of identifying hot-spots for potential optimisation.