

## Oisín Mulvihill - Curriculum Vitae

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An entrepreneurial, passionate and creative developer with more than 12 years experience. A strong believer in delivering high quality solutions for clients through test driven development.

### Major Achievements:

- Designed a distributed application framework used in automated ticket purchase & collection systems throughout Norway and the UK.
- Designed the first prepaid Internet kiosk solution in Ireland.
- Rapid development & deployment of a top up system used to credit prepaid phone cards.

### Recent Professional Experience:

*August 2006 – August 2010, Lead Developer, Newman Online Limited, England:*

Choosing the Turbogears framework, I developed the web sales platform used to sell tickets throughout the UK and Norway. This platform could be customised using a plug-in system. This allowed a wide variety of changes to be made on an application or customer specific basis.

I designed and developed an automated ticket collection and purchase system. This was a further extension to the plug-in system. It added hardware abstraction with messaging using the STOMP protocol and ActiveMQ. I also had to develop drivers for the system. For example payment protocol over TCP/IP to interface to Norwegian chip and pin systems.

I also developed Newman's "print-at-home" system, similar to those used in Airports. This was based around ticket booking references which were encoded as Aztec bar codes. I used Python and Ghostscript for the generation task. Email confirmations would contain image links to a Turbogears web service. This generated and cached the Aztec images displayed in emails.

I championed the introduction of Test Driven Development (TDD) and the adoption of some of the principles of Agile Development. The testing and test data generation system I developed, greatly increased the code quality and system flexibility.

*Technologies used:* Python, Django, CherryPy, Twisted, Pylons, Turbogears, Javascript (jQuery & YUI), XUL, XHTML/HTML/HTML5, XML, CSS, C++, SQLServer2k5/2k8, PostgreSQL, Bzr, Svn, Debian, Ubuntu, Citrix Xen, Windows 2k3-2k8, MacOSX, TCP/IP, Apache, Trac.

*March – May 2010 – Director / Developer, PythonPro Limited, England:*

Using Python, Pylons, Evasion.Web and Couchdb I produced the back-end and lower level API functionality used in PythonPro's musician CMS platform. I worked & coordinated with the front-end developer, together producing two clients sites <http://www.madeleineeaston.com/> and <http://www.kavanagh-ensemble.com/>

*Technologies used:* Python, Pylons, Javascript (jQuery & YUI), (X)HTML/HTML5, Couchdb, Bzr, Debian & Apache.

*May 2009 – February 2010 – Consultant, Flight Data Services, England:*

I designed & developed a prototype web application allowing experts to analyse black box data. I introduced the Agile Development methodology to manage change efficiently. The test driven aspect of this involved using Python's "unittest" and "nose" to create test cases verifying the low level API.

The web based front-end was verified using Selenium Remote Control.

*Technologies used:* Python, Pylons, Javascript (jQuery & YUI), XHTML, CSS, PostgreSQL, Bzr, Debian & Apache.

*August 2004 – August 2006, Web Developer, The pH Group, England:*

I designed & developed web based financial analysis programs for most major banks in England. I introduced software development practices such as revision control, issue tracking, unit acceptance testing.

*Technologies used:* Python, Nevow, CherryPy, Turbogears, Twisted, Javascript, XHTML, CSS, MySQL, Oracle, Svn, CVS, Debian, Gentoo, Windows 2k & Apache.

*November 2003 – August 2004, Consultant, Westglobal, Ireland:*

I produced a Python based test system used to verify their main Java based product mScope.

*Technologies used:* Python, Java, Spring, Hibernate.

*May 2002 – August 2009, Developer/Director, Engines Of Creation Limited, Ireland:*

Scratch Card Prepay Internet Kiosk System: This project called for the development, deployment and support of a series of PC based kiosk machines and a central server. A customer wishing to use a kiosk would purchase a scratch card and enter the number on it. The kiosk communicated validating with the server. It would tell the machine to unlock for a set period of time, allowing the customer to browse the Internet. When the time elapsed the kiosk would then lock.

Telephone Call Card Software: This contract produced a program capable creating and tracking prepaid call card top ups. It interface to a major telco's system to perform the card top-ups.

Internet Cafe Management Software: I developed software with two others to record the usage of PC machines in a cafe an associate was running.

*Technologies used:* Python, Nevow, Twisted, pyGTK, GTK, RPM, Javascript, XHTML, CSS, MySQL, Svn, CVS, Fedora Code Linux & Apache.

### **Open Source Experience:**

I am the project coordinator and lead developer on the following open source projects:

Evasion Project (<http://www.evasionproject.com>)

ServiceStation (<http://www.foldingsoftware.com/servicestation/wiki>)

Stomper (<http://pypi.python.org/pypi/stomper/>)

### **Interest & Hobbies:**

Hiking, Scrambling, Photography (<http://www.flickr.com/oisinmulvihill>), Caving, Rock Climbing and anything that gets me outside really.