# James Anthony Stewart

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Information Technology Engineer with over a decade of experience in Operations and an increasing focus on Software Design and Development. Maker and Open Source proponent/contributor with a life-long passion for technology. Specialising in Linux, Python, IoT, 3D Printing and Monitoring.

## Employment

### Thermeon Worldwide - *Remote*

**DevOps Engineer** *08/2015 - present*

Member of a geographically distributed DevOps team administering single-tennant client instances of industry-leading automotive rental software.

* Orchestration of physical and virtual hosts in EU and APAC co-locations using Ansible and Puppet.
* Design and development of internal services using Docker containers deployed on Mesos.
* Development of internal tools in Ruby and Golang.
* Monitoring and analysis using Graphite/Grafana and Elasticsearch/Logstash/Kibana.
* Working effectively and 100% remotely with Customer Support, Development and Operations staff in various locations around the globe.

### Optiver Asia Pacific - *Sydney, Australia*

**Tools Developer** *09/2013 - 07/2015*

Member of a Development team practicing Kanban and delivering tooling to various departments across the business.

* Development of numerous microservices built on Flask and Django.
* Design of RESTful APIs with backends built on Postgresql, Redis and MongoDB.
* Development of Python libraries to simplify interaction with internal services.
* Frontend development using HTML, Twitter Bootstrap, CSS and Javascript/JQuery.
* Unlocking the value in Graphite metrics by championing Grafana.

**Monitoring Engineer** *04/2010 - 09/2013*

DevOps role responsible for the monitoring of highly critical financial trading systems.

* Replaced HP monitoring suite with Zenoss saving ~$200k per annum in licensing + support.
* Developed Python middleware to integrate Zenoss with Puppet, Active Directory, HP Service Manager and ServiceNow eliminating tedious and error-prone manual tasks.
* Implemented systems for operational metric collection and analysis utilising Graphite, StatsD, Django and Apache Flume.
* Attended Puppet Advanced training and employed Puppet to orchestrate deployment of software + configuration to a fleet of >500 hosts.

### Travelling - London to Sydney

**Nomad** *06/2009 - 02/2010*

An epic journey across the planet from London to Sydney without catching planes. Western Europe, the Baltics, Scandinavia, Eastern Europe, the Middle East, (through Turkey, Iran and Pakistan), India, Nepal, Tibet, China and home through South-East Asia.

*(Ok so there was one little flight from Bali to Perth but we took the train onward to Sydney)*.

### Beam.tv/The Mill - London, United Kingdom

**Systems Manager** *03/2005 - 06/2009*

Senior Systems Administration role responsible for junior sysadmin and all operational aspects of the Beam.tv web site across 3 data centres.

* Installation and support of CentOS 5.x servers running Apache 2.x and load balanced with LVS to serve >10k unique visitors and >1 million hits/day.
* Rollout of New York co-location based on Squid reverse proxies and Citrix WANScaler network accelerators reducing download times for US customers by >50%.
* Administration of Oracle 10g RDBMS backend.
* Monitoring using Nagios, Cacti and Zenoss.
* Implementation of Subversion/TRAC and formal daily code release system.
* Management of capex/opex budgets and reporting to senior staff.

### InciteMVNE - London, United Kingdom

**Operations Manager** *10/2003 - 02/2005*

Systems Administration role responsible for all operational aspects of a mobile content delivery system.

* Installation and support of Redhat ES 3.x servers running in-house mobile phone content delivery system (J2EE/JBoss/Tomcat).
* Administration of Oracle 9i RDBMS backend.
* Configuration of WLANs and VPNs at client sites for content delivery.
* Design and development of football community websites using HTML, XML/XSLT and PHP.

### Travelling - Europe

**Nomad** *05/2003 - 10/2003*

Backpacking around Europe embracing new cultures, attending music festivals and acquiring life experience. Eventually settled in London when money ran low and it became too cold for camping.

### Professional Golfers Association of Australia - Sydney, Australia

**IT Administrator** *02/2002 - 05/2003*

Responsible for all aspects of the PGA’s nationwide IT infrastructure, (50 users throughout national head office and 4 state offices). Introduced Open Source solutions to save this member-based organisation significant ongoing licensing costs.

### Access Gaming Systems - Sydney, Australia

**Systems Administrator** *12/1999 – 02/2002*

Member of a 4-person team responsible for company network of 150 users running Win 98/NT/2k and servers running Redhat Linux, Solaris and Win NT/2K Server.

## Projects

[SparkCC](http://sparkcc.org)

President and co-founder of SparkCC: a makerspace/hackerspace located on the Central Coast of New South Wales, Australia.

[OpenGB](http://opengb.readthedocs.io)

OpenGB is a 3D printer control interface written in Python. Printer functions are exposed via a websocket API built on Tornado and called either programatically or by an included touchscreen GUI written in Vue.js.

[Braubbuddy](http://braubuddy.org)

Braubuddy is an Open Source temperature management framework written in Python. Conceived as a means of monitoring and controlling the fermentation temperature of beer.

[Tosr0x](https://github.com/amorphic/tosr0x)

Tosr0x is a Python module for communicating with ‘TOSR0x’ USB relay controllers made by [TinySine](http://www.tinyosshop.com).

[CoverLovin](https://github.com/amorphic/coverlovin)

CoverLovin is an Open Source album cover art downloader written in Python. It recursively traverses a directory structure containing mp3 files and downloads cover art from Google Images based on id3 tags.

## Presentations

### Controlling a 3D Printer with Python

08/2016

PyCon Australia Sydney ([video](https://www.youtube.com/watch?v=qgvnPB_77z8))([slides](http://slides.jimter.net/3d_printer_control_with_python/))

07/2016

Sydney Python User Group

## Qualifications

1998-2001

**University of Technology, Sydney**

Bachelor of Science: Computing Science (Honours 2nd Class).

*Sub-major in Computer Graphics.*

2012

**EXIN**

ITIL v3 Foundation

2013

**Red Hat, Inc**

Red Hat Certified Systems Administrator (RHCSA)