James Anthony Stewart

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Information Technology Engineer with over a decade of Operations experience 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

Honesty Box - *Sydney, Australia*

Head of Technology
01/2019 - present

Responsible for technical direction, architecture and engineering for a fleet of 1500+ IoT devices and associated services.

- Introduced kanban board and agile concepts to bring structure to the software development process.

Enstaved - *NSW Central Coast, Australia*

Co-founder / Tech Monkey
04/2017 - present

Co-founder responsible for the IT infrastructure and manufacturing processes of a growing niche product startup.

- Developed shop.enstaved.com using a custom fork of Saleor (e-commerce platform built with Python + Django).
- Developed a service to render dynamic custom product images in near-real-time using Flask and OpenSCAD.
- Orchestrated hosting of all services using Docker containers deployed with Docker Compose to DigitalOcean droplets.
- Developed a scalable production process based on Fused Deposition Modelling (3D Printing) allowing Enstaved to bring custom, locally manufactured physical products to market rapidly and cost-effectively.

Availery - *NSW Central Coast, Australia*

Consulting DevOps Engineer
01/2019 - 03/2019

Consultant responsible for the migration of availery.com infrastructure to Amazon Web Services.

- Migrated web services from legacy single-VM hosting to AWS utilising EC2, RDS, ELB, S3 and EFS.
- Created automated build pipelines using CodeBuild/CodePipeline/CodeDeploy.
- Orchestrated infrastructure configuration and deployment using Terraform and Ansible.

Thermeon - *Remote*

DevOps Engineer
08/2015 - 12/2018

Member of a geographically distributed DevOps team administering industry-leading automotive rental Software as a Service.

- Orchestrated worldwide virtual host configuration mananagement using Ansible and Puppet.
- Migrated services from legacy KVM hosting to Google Cloud Platform (GCP) orchestrated with Terraform.
- Designed and developed internal services using Docker containers deployed to Mesos and Kubernetes (GKE).
- Developed and maintained monitoring and analysis using Graphite/Grafana and Elasticsearch/Logstash/Kibana.
- Worked effectively and 100% remotely with Customer Support, Development and Operations staff in various locations around the globe.

iCrew - *Remote*

Technical Partner
04/2016 - 06/2017

Early-stage partner responsible for development and hosting of a web-based application to manage a roster of sub-contracted event staff.

- Introduced Founder and Project Manager to Agile development process based on Kanban.
- Developed dynamic RESTful API backend using Eve (Python + Flask + MongoDB).
- Developed single-page frontend application using Vue.js + Vuex.

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.

- Developed numerous microservices built on Flask and Django.
- Designed RESTful APIs with backends built on Postgresql, Redis and MongoDB.
- Developed Python libraries to simplify interaction with internal services.
- Frontend development using HTML, Twitter Bootstrap, CSS and Javascript/JQuery.

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/Grafana, StatsD, Django and Apache Flume.
- Attended Puppet Advanced training and employed Puppet to orchestrate deployment to >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 (via 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.

- Installed and supported CentOS 5.x servers running Apache 2.x and load balanced with LVS to serve >10k unique visitors and >1 million hits/day.
- Rolled out New York co-location based on Squid reverse proxies and

Citrix WANScaler network accelerators reducing download times for US customers by >50%.
- Implemented monitoring using Nagios, Cacti and Zenoss.
- Managed 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 built on J2EE/RedHat/Oracle.

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	President and co-founder of SparkCC: a makerspace/hackerspace located on the Central Coast of New South Wales, Australia.
OpenGB	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	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	Tosr0x is a Python module for communicating with 'TOSR0x' USB relay controllers made by TinySine.
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 Melbourne (video)
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)