

Russell Keith-Magee

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Employment History

Principal Software Engineer

Anaconda
March 2022-Present

- Project lead for the BeeWare project in the Open Source group.
- Responsible for setting the strategic direction of the work done on BeeWare inside Anaconda, and for coordinating the efforts of the other members of the BeeWare team at Anaconda.
- Managed the community resources of the BeeWare project.

Senior Software Engineer / Staff Software Engineer

Upwave
March 2018-February 2022

- Squad captain for the "Insights" squad. Responsible for designing and implementing new features in the data analysis pipeline. Also responsible for managing engineering priorities and planning for the rest of the squad.
- Squad captain for the "World Domination" project, expanding the deployment of the Upwave product into Australia and Europe. Responsible for formalizing the DevOps definition for the entire Upwave stack so it could be deployed into multiple data centres, and managing development of other engineering changes needed to deploy multiple instances of the stack.
- Member of the Data Science team. Responsible for converting a manual data analysis process into an automated pipeline that runs every night on AWS cloud infrastructure.

Software Engineer

Zapier
August 2017-February 2018

- Worked on the Product Engineering team, helping to develop the core Zapier platform
- Responsible for upgrading several key internal systems for Python 3 and recent Django compatibility

Freelance Developer

JamBon Software
October 2016-May 2017

- Responsible for the development of CertCycle, a SaaS for provisioning, installing and verifying SSL certificates. This product is a Django website, backed by a PostgreSQL database, running on Heroku. The site also used Amazon, Azure and Let's Encrypt APIs.

CTO and Co-Founder

TradesCloud
2011-2017

- Responsible for the design and development of TradesCloud, a SaaS for tradespeople (plumbers, electricians, etc). This product was a Django website, backed by a PostgreSQL database, running on Apache+mod_wsgi behind an nGinX proxy. The site also used memcached, Redis, and Twilio Messaging APIs.

- Responsible for developing a cross-platform mobile application supporting iOS and Android that integrated with the TradesCloud website. This app was initially a HTML5 rich web app; it eventually transitioned into a PhoneGap app.
- Responsible for developing customer integration tools to support TradesCloud sales. A key part of the TradesCloud offering was integration with existing processes and systems; this involved writing parsers to extract information from PDFs, export tools that used a Selenium-based robot to submit updates to software portals that didn't provide an API, and integration with MYOB and Quicken accounting packages.
- Responsible for all customer support, including both initial customer training and ongoing phone/email support.
- Responsible for all product deployment and operations. TradesCloud was deployed on Rackspace public cloud, and was able to maintain near "5-nines" availability.
- Responsible for developing engineering schedules and estimates.
- Responsible for performing all technical sales demonstrations, and writing the technical components of RFPs for larger contracts.

Freelance developer

Common Code; Revolution Systems; Votizen
2013

- Provided Django software development services on a freelance basis to a number of startups.

Senior R&D Software Engineer

Hunted Media
2007-2011

- Contributed to the design and development of the Wotnews and We Are Hunted websites. These products were Django websites, backed by extensive data scraping, aggregation and analysis tools written in Python. Wotnews analyzed news sources, ranging from newspapers to press releases. We Are Hunted looked at data related to the music industry, ranging from music press to blogs and social media.
- Responsible for developing a number of rich-media iOS applications, including "MySpace Romeo" (MySpace's first iOS app), "Pocket Hipster" and "SuperSonic" (both music discovery apps).

Software Engineer, Senior Software Engineer

Calytrix Technologies
2001-2007

- Responsible for the design and development of SIMplicity, a Model Driven Architecture (MDA) based IDE for simulation developers. SIMplicity consisted of a web-based GUI, supporting a C++ runtime. Previous versions of SIMplicity provided a Java-based GUI; I was responsible for the development and maintenance of this GUI.
- Responsible for managing the design and development of Portico, an open-source implementation of the HLA distributed simulation protocol. Portico is written in Java.
- Heavily involved in the design and development of Mentor, a web-based tool for gathering assessment data during large training exercises. Mentor is written using Django, connecting to PostgreSQL and SQLite databases.
- Responsible for a number of consulting contracts for a range of customers, primarily in the defence sector.
- Responsible for developing and teaching the 4 day SIMplicity training course offered by Calytrix.
- Responsible for managing student and intern projects.
- Responsible for acting in a sales support role. This involved visiting customer sites, giving sales presentations and representing the company at trade shows and conferences.
- Involved in the writing, editing and presentation of conference papers that explore the theoretical and practical application of MDA to simulation.

Lecturer

Curtin University, School of Computing
Semester 1, 2001

- Lecturer in charge and sole tutor for the unit "Artificial and Machine Intelligence 251".
- Duties included preparing and presenting lectures and tutorials, preparation of examinations and assignment materials, marking all submitted work and representing the unit at the Board of Examiners.

Other experience

BeeWare Project

2013-Present

BeeWare (<http://beeware.org/>) is a project developing tools and libraries for cross platform, native application development in Python. The most notable parts of BeeWare are [Toga](#), a Python-native, cross-platform GUI toolkit supporting both desktop and mobile platforms; and [Briefcase](#), a tool for packaging Python code as native applications.

- Project founder and major contributor to the entire BeeWare codebase.
- Recipient of a US\$50k grant from the Python Software Foundation to enhance Android support. I co-wrote the application for this grant, and managed the selection of subcontractors and delivery of engineering output.

Django Project

2006-Present

Django (<http://djangoproject.com/>) is a framework for the rapid development of database-backed web applications.

- Core contributor to the project, responsible for developing new features, fixing bugs and reviewing contributions of others.
- President of Django Software Foundation from 2010-2015. This was a community development role, involving fund raising, policy development, and development of legal tools to support the project.
- Contributed a major refactoring of the database querying interface.
- Initial developer of the test framework and tools for the project.
- Significant contributor to the XML, JSON and YAML serialization frameworks.
- Contributor of many minor bugfixes.
- Mentor of multiple Google Summer of Code projects.
- Regular contributor to users and developers mailing lists.
- Regular speaker at conferences on technical aspects of Django, and about the process of engaging with the Django project as an external contributor.

Academic History

Doctor of Philosophy

Curtin University, School of Computing

January 1998 - June 2001

Doctoral Thesis entitled "Learning and Development in Kohonen-Style Self Organising Maps" was submitted 30 June 2001. Thesis was passed unconditionally, with Vice Chancellor's Commendation. For the first three years of study, I was the recipient of the Curtin University Silver Jubilee Scholarship. This is the highest scholarship honour granted by Curtin University.

Bachelor of Science (Computer Science) (Honours)

Curtin University, School of Computing

1997

Thesis entitled "A Neural Architecture for Modelling Error in Low Resolution Numerical Predictions of Mathematically Intractable Systems". Graduated Dux of Class, with First Class Honours.

Bachelor of Science (Physics)

School of Physical Sciences, Curtin University

1994-1996

Graduated with Distinction, Dux of Class. During this degree program I was a three time winner of the Dean's Prize, winner of the Ron Date Memorial Prize, the 1997 AIP Student Prize and a six time inductee of the Vice Chancellor's List (a group consisting of the top 1% of Curtin University Students).

Core skills and Competencies

Written Communication

- I have authored, co-authored and reviewed a number of project status reports, white papers, and RFP submissions.
- I am a regular contributor to developer and user mailing lists in support of open source projects.
- I have authored and edited large portions of the User and Programmer Reference manuals for Calytrix's SIMplicity product.
- I am a published author in the proceedings of international conferences.
- I have produced Honours and PhD theses, both of which were passed unconditionally.
- I was Chief Editor of the proceedings of Principia Physica, a student organized physics conference.
- I achieved a TEE English Literature score of 93%.

Verbal Communication

- I am a regular speaker at DjangoCon and PyCon events, including being an invited keynote speaker for PyCon US 2019, PyCon Thailand 2019, PyCon Colombia 2019, PyCaribbean 2017, Python Brasil 12, PyCon Australia 2016, PyCon Czech 2015, PyCon Philippines 2014, and PyCon Russia 2013.
- I have developed and presented in-house developer training at Upwave
- I have delivered in-person product training, both in short-form 1-2 hour courses, and in week-long training courses. I have also been responsible for developing the training materials supporting these courses.
- I was a regular contributor to the Postgraduate Research Forum in the School of Computing at Curtin University.

Software Engineering

- I have commercial experience, both as a user and as a system administrator, in the use of Linux/Unix, Windows and Mac OS X operating systems.
- I am literate in many programming languages, including Python, Java, Javascript, Objective-C, C, C++, Common LISP, and FORTRAN. I have taught students in all of these languages.
- I have practical and current experience using Python, Javascript, Objective-C, Java, and C++ in a commercial environment.
- I have extensive experience using and contributing to Open Source tools. This includes my current role as a core contributor to the Django web framework.
- I have extensive experience using PostgreSQL, MySQL and SQLite.
- I have commercial experience using Git, Mercurial, SVN, CVS and ClearCase.
- I have extensive commercial experience using AWS cloud infrastructure, and some experience with Google Cloud and Microsoft Azure.
- I have experience in the use of Terraform and Salt for DevOps configuration.
- I have extensive experience using a variety of tools for issue tracking, including Jira, Trac, Clearcase and Github Issues. I am also familiar with the use of Github workflow to manage project contributions.
- I have extensive experience in the writing of unit tests, and integration of those test suites with continuous integration services (Jenkins/TravisCI/CircleCI/Github Actions).

Leadership

- I was the President of the Django Software Foundation from 2010-2015.
- I have mentored many students through the Google Summer of Code program.
- I am an industry representative on the Curtin University School of Computing Industry Advisory Board.
- I was responsible for managing student and intern projects at Calytrix.
- I was General Chair of Principia Physica, a student organized and run Physics conference.
- I was the student administrator of the Curtin University Vice Chancellor's list from 1998-2001.

Project Management

- I developed the engineering plans for the BeeWare team at Anaconda.
- I have acted as a Scrum leader/Squad captain at Upwave, managing engineering planning for teams of up to 4.
- I was responsible for all project management at TradesCloud.
- I was the Project Manager for the SIMplicity and Portico projects at Calytrix.
- I was been responsible for planning and delivering a number of short to medium term contracts at Calytrix.
- I performed independent, long-term research on large scale projects in my undergraduate, honours and doctoral programs, consistently meeting deadlines.

References

Available on request