Sett **Wai**

SOFTWARE ENGINEER · POLYGLOT PROGRAMMER

Cape Town, South Africa

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Summary

Software engineer with 9+ years professional experience in a diverse range of projects, technologies, domains and teams, all over the world. While initially pursuing an interest in game development, a strong inclination for learning all things tech and a series of good opportunities allowed Sett to grow into a competent software development generalist and consultant. A good intuition and keen interest in systems (both technical and social) led him to his current role in the Science & Engineering sector.

Passionate about Continuous Delivery, Open Source and the developer experience. Cares deeply about craftsmanship and meaningful work.

Skills

Languages	Python, Shellscript, Go, JavaScript
Messaging & Data	RabbitMQ, Kafka, ZeroMQ, PostgreSQL, MySQL/MariaDB, MongoDB, Elasticsearch
DevOps	Jenkins, GoCD, ConcourseCI, Vagrant, Docker, Ansible, Kubernetes, OpenShift, ELK
Software Engineering	Continuous Delivery, Distributed Systems, Microservices, Infrastructure as Code, Legacy, Domain Driven Design
Practices	Automation, TDD, Pair Programming, Refactoring, CI/CD
Dabbles in…	Elm, Prolog, Haskell
Natural Languages	English, Afrikaans, Burmese

Experience

South African Radio Astronomy Observatory (NRF)
Cape Town, South Africa

SOFTWARE ENGINEER · *Jan 2019 - Present*

- Developed foundational testware and tooling to support the automated testing of infrastructure configuration so that Infrastructure as Code best practices are introduced to the Square Kilometre Array (SKA) telescope project (Pytest, Helm, Kubernetes).
- Key contributor to the log format specification used in the SKA Telescope that enables standardised logging for all teams, subsystems and components (ABNF, ELK).
- Analysed and improved the build, deploy and release process of the MeerKAT telescope's control system to be more reliable and repeatable. Presented this work as a poster + paper at ICALEPCS 2019 (Python/Fabric, Ansible, Jenkins, Docker).
- Collaborating in planning and implementation of the international Square Kilometre Array radio telescope project as member of one Agile team out of many in a large-scale, multi-national endeavour (Gitlab, Python, Kubernetes).

Independent Contractor/Self-employed
Johannesburg, South Africa

TECHNICAL CONSULTANT · *May 2018 - Dec 2018*

- Implemented a SDK (ported from C#/Unity) for a small media & game development company's new interactive technology product/platform (JavaScript, NodeJS).
- Development of tool to improve testing of stream architectures - piecework in collaboration with FoldLeft Consulting for undisclosed client (Java, Apache Kafka).

ThoughtWorks, Inc.
South Africa, Uganda, USA, Brazil, Kenya

CONSULTANT/SENIOR/LEAD DEVELOPER · *Apr 2013 - Dec 2017*

- Bootstrapped a project team and laid technical foundations, practices and software delivery approach to replace legacy corporate banking integration in large SA bank (Spring Cloud, OpenShift) - 7 months.
- Pursued and led the development of an app for securities trading over USSD in Kenya (ASP.NET Core) - 3 months.
- Implemented new features and improvements, as part of a large, distributed team creating a flagship Point Of Sale (POS) platform for large US retailer (iOS WebView, AngularJS, Spring, Microservices) - 11 months.
- Made key contributions to technical approach and the development of a greenfield Counter Human-Trafficking system in Uganda (DropWizard, bespoke front-end) - 3 months.
- Technical lead on an Anti-counterfeit Medicine verification system over SMS, deployed across Africa (Django, RabbitMQ, MongoDB) - 14 months.
- Individual contributor to OpenStack testing framework for large ISP in the US, as member of a Quality Engineering team (Python) - 6 months.

Alacrity Technologies (Pty) Ltd
Johannesburg, South Africa

INTERN/JUNIOR DEVELOPER · *May 2011 - Oct 2012*

- Built a prototype mobile web app for booking boardrooms (Play! framework, BackboneJS)
- Maintained/extended legacy ASP.NET (VB.NET) application for training fund trustees at a large financial services company. Introduced version control and modern web development practices there.
- Sole developer of online web portal and mobile web app to allow customers to view their pension fund statements online for above-mentioned company (ASP.NET MVC4, JQuery Mobile)

Certifications

- Certified Kubernetes Application Developer - CKAD-2000-002909-0100

Education

UP (University of Pretoria)   *Pretoria, South Africa*

B.IS (Multimedia)   *Feb 2006 - Apr 2010*
- A combination of Computer Science and Software Engineering core modules with additonal focus on Web & Multimedia, Visual Design, Human-Computer Interaction, Game Development.

Publications

- S. Wai, "Toward Continuous Delivery Of A Nontrivial Distributed Software System", in Pre-Proceedings, 17th Biennial International Conference on Accelerator and Large Experimental Physics Control Systems (ICALEPCS 2019): New York, NY, USA, October 5-11, 2019, WESH2003.

Miscellaneous

social impact Technical mentor providing Agile software delivery expertise to team cohorts at codeschool (WeThinkCode). Also provides one-on-one individual mentoring as a volunteer in the OfferZen Foundation Project Thrive mentorship program.

hobbies Archery, mountain biking and photography.