Andrew Howden

This resume is being regularly updated. An up to date copy is available in HTML at www.andrewhowden.com or via downloadable PDF on the same website.

Email	hello@andrewhowden.com	GitHub	@andrewhowdencom
Telephone	+49 176 37658815	LinkedIn	andrewhowdencom
Website	www.andrewhowden.com	Twitter	@andrewhowdencom

Professional Background

MageMojo

Dates	2018-12 - present
Location	Remote

While my commitments to MageMojo are only part time my responsibilities have included helping in the design of new clusters, debugging complex networking issues, designing network topologies for large clusters, helping with the implementation of infrastructure as code and CI/CD.

Achievements

- Helping design and release large scale Kubernetes infrastructure[1]
- Debugging complex issues such as processes frozen in D state[2]

Global Fashion Group

Dates	2019-04 - 2019-09
Location	Berlin, Germany

At Global Fashion Group my responsibilities were as a general software engineer working on the "SellerCenter" product. This product allowed merchants to list their goods in the GFG venture platforms such as Dafiti, Lamoda, THE ICONIC and ZALORA.

The product was based on PHP.

Achievements

- Replace the CI/CD system "Jenkins CI" with "CircleCI"[3]

Sitewards GmbH

Dates	2016-10 - 2019-04
Location	Frankfurt, Germany

At Sitewards my responsibilities mirrored my responsibilities at Fontis but included a much heavier responsibility designing and managing the production infrastructure and tooling for these systems.

I worked with several projects all with some eCommerce property including Maschinenring, Schramm, Staedtler, Pluradent and so on.

Achievements

- Designed and implemented the infrastructure, monitoring and deployment definitions of several production e-commerce systems.

- Transitioned the company from the monitoring service "New Relic" to the open source "Prometheus".

- Designed and implemented CI/CD for a variety of PHP, Node, Ansible and static HTML services in both BitBucket Pipelines and Travis CI

- Designed and implemented the "incident response" process used for technical crisis management and resolution.

- Collaborated in the detection and remediation of unauthorized access to a significant service.

- Qualified as a "Certified Kubernetes Administrator".

- Helped with the organisational understanding of and adjustment to the "General Data Protection Legislation" (GDPR) as it applied to Germany.

- Implemented a centralised, community managed knowledge base.

- Evangelised the use, implementation and understanding of various kinds of diagnostic data such as time series, logs, traces and other system introspection tools.

- Helped implement team analytics to determine the health, mood and stress levels of the organisation.

- Developed or contributed to both helm chart and ansible roles for OSQuery and the OSQuery fleet management tool "Kolide Fleet".

- Organised and chaired development community meetings designed to facilitate knowledge sharing.

- Helped facilitate an employee evaluation and growth framework.

- Debugged countless complex production outages.

Fontis PTY LTD

Dates	2014-10 - 2016-04

Location	Melbourne, Australia

At Fontis my responsibilities were varied and included nearly all aspects of software management. In conjunction with my time I was responsible for working directly with business partners to design a roadmap for software, the technical plan for how such software could be implemented, the implementation of that roadmap subject to changing business requirements and periodically revisiting the technical direction with a view to maximise business return on invest and finally the production management of that software.

I worked with several large eCommerce projects including Quiksilver, Bing Lee, Teds and so on.

Achievements

- Collaborated in the maintenance, feature development, deployment and management of multi-million dollar e-commerce stores.

- Primarily responsible for several major software migrations, site redesigns and feature developments such as the GAZ MAN redesign, Bing Lee checkout redesign and MageAudit.

- Developed a structure for deploying applications onto Kubernetes continuously, including numerous safety checks.

- Developed a structure for automatically checking the style and quality of code as part of the standard review process.

- Developed provisioning tools that create and manage a Kubernetes cluster that tolerates failure of an application, machine or network partition.

- Developed a template for a JavaScript module that can be loaded by dependency management systems asynchronously.

- Contributed to open source projects such as Ecomdev_CheckItOut, Boilr and Modd.

Skills & Knowledge

Specialising in developing open source software related to the development, deployment, monitoring and management of internet facing software. List of competencies include:

Software Languages	PHP · HTML · CSS · SASS · Bash · ECMAScript (JavaScript) · Golang · Python · Make · Ruby · JSON+LD · RDFa · sh · SQL
Frameworks	Magento · Laravel · Symfony · Joolma · Hugo · Bootstrap · PostCSS · Phing · Grunt · Polymer · RequireJS · Composer · Bower
Operating Systems	Linux · Windows · Debian · Ubuntu · CentOS · Arch · CoreOS
Infrastructure	Docker · Rkt · Kubernetes ·Virtualbox · NGINX · Apache HTTP · Docker Compose · Calico · Flannel · TravisCI · Jenkins · Netcat · Tcpdump · cURL · Aptitude ·Yum · Picfit
Monitoring	Prometheus · Sensu · Logstash · Beats · Elasticsearch · Kibana · Grafana
Testing	Selenium · Facebook Web Driver · PHPUnit
Software Analysis	PHP · PHPCS · eslint · scss-lint · jsonlint
Website Analysis	Google Analytics · Chrome DevTools · Lighthouse · Google PageSpeed Insights · Qualsys SSL Test
Network Protocols	HTTP/1.1 · HTTP/2 · FastCGI · TCP · UDP · TLS/SSL
Cloud Services	Amazon Web Services · Google Cloud · Let's Encrypt
Security	Pass · PGP ·GnuPG · OpenSSL · HSTS · CSP · Nmap
Development	Boilr · Intellij IDEs · Atom · Git · Arcanist · Phabricator · GitHub · Request Tracker · Modd · strace · strings · xdebug · xdd

References

1. A. Howden, "Design extensible Kubernetes infrastructure in AWS." https://www.andrewhowden.com/case-studies/design-extensible-kubernetes-infrastructure-in-aws.html , Sep-2019.

2. A. Howden, "Resolving frozen processes in Kubernetes." https://www.andrewhowden.com/case-studies/resolving-frozen-processes-in-kubernetes.html , Sep-2019.

3. A. Howden, "Switch from JenkinsCI to CircleCI." https://www.andrewhowden.com/case-studies/switch-from-jenkins-ci-to-circle-ci.html , Sep-2019.