HSC & SC

Blue Mountains Grammar

School

1999 - 2005

EDUCATION

OH/S Construction Induction

Training Certificate

RSA & RCG

B.E in Information Technology -

Major in System Admin

Charles Sturt University

2011 - 2015

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0449 856 278

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Full Stack Developer

Thomas Crha



SUMMARY



Hi I'm Tom, I'm a full stack software engineer with experience with large highly available, cloud-based web applications with a user base's in excess of 500k. I’ve worked closely with Python, AngularJS, JavaScript ES6 and AWS. I’ve also worked closely with various data science modules like pandas, NumPy and SciPy for doing data modelling and learning on various types of data (audio, video, text, lexicons). I also have vast experience with API integrations and creating and implementing ETL systems.

# EXPERIENCES



## Front End Developer Jun 2019

Wattwatchers Australia

One-month contract working with Vue.js creating an onboarding app for their data trackers. *Stack/Tech – Vue.js, Django, Timescale (PostgreSQL), webpack, yarn, bulma*

## System Developer May 2019

Datatronic Australia

Two-week contract integrating various systems (CRM, POS, Inventory) via there public API’s into one simple tool utilizing an internal DBMS system accessible via a simple SPA site.

*Stack/Tech – Vue.js, python, Flask, SQLAlchemy, PostgreSQL, Linux (Debian), xero, reciptbank*

## Full Stack Software Engineer

Appen Australia

Mar 2018 – May 2019

Part of a small team maintaining Appen's language resource work tool, Ampersand. Running the day-to-day tasks of the site (dev-ops and infrastructure management), feature creation and bug fixing.

*Stack/Tech – python, flask, SQLAlchemy, PostgreSQL (AWS AZURE cloud), Elasticbeanstalk, Travis, Linux (Debian), AngularJS, yarn, webpack, selenium, docker-compose, AWS, JIRA, pivotal, Confluence, Cloudwatch, SNS, celery, EC2, S3, redis, apache, git, git-flow, lamda*

* Helped move from our old system to Ampersand beginning 2018
* Managed our AWS cloud Infrastructure and CI deployments
* Managed tickets and bugs associated with the platform
* Implemented a large-scale data automated onboarding/deletion system (2tb of data per week)
* Developed features within a two-week sprint cycle
* Communicated and worked with product owners throughout the development cycle
* Helped increased testing code coverage too 85%
* Implemented our lexicon tool into Ampersand feature set
* Implemented the video transcription module used inside the tool allowing users to annotate video recordings.

## Project Engineer

Appen Australia

Apr 2015 - Mar 2018

Creating custom solutions for various projects to meet client and business needs.

*Stack/Tech – Python, Flask, SQLAlchemy, Linux (Debian), react, Vue.js, scrapy, SciPy, pandas, selenium, bash, vim, requests, JIRA, Confluence, sed, awk, GNU utils, apache*

* Helped transition from python2 -> python3 (conversion of scripts and sites)
* Developed custom scripts/web applications for client projects
* Various API and ETL integration’s
* Linux server work to deploy and manage the various scripts/web applications
* Maintaining data flow in and out of our various tools as the projects desired
* Automation of tasks for project management and organisation
* Worked closely with project managers to load and package data for clients
* Various data science analysis’s
* Created multiple different packaging scripts and workflows for repeat clients
* Created an automated backup system utilising AWS's Glacier storage tier

## Founder and Operator

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Full Stack Developer

Thomas Crha



2014 - present

A computer solution company providing mainly small business in my local area with various tech services and assistance.

## Lead Developer and System Administrator

Outflanked Paytracker, AUS

2015 - 2017

An application allowing workers to track their pay when they work unusual hours and on forever adjusting award rates.

*Stack/Tech – AngularJS, node.js, Heroku*

# THINGS I’M PROUD OF



Video transcription/annotation 'work page' - allows users to mark the video using a view finder at multiple points. These can be grouped into pairs (start and end) utilised for transcription or singular points for annotations and tagging. It also allows users to select areas in the video feed itself, this is utilised for identifying specific object types specific to the collection.

End-to-end selenium testing suite - a client-side testing suite implemented with server tests, utilising selenium, docker and py-test allowing end-to-end testing of web applications. The framework provides a simple methodology for working through webpages via xpath's, allowing for DOM object waiting/checking.

Secure Transcription - An application allowing for the automatic downloading of

audio sources from a specialised body-cam provider. The application would listen for new files to become available and download them, a separate application would then host the files in air-gapped area allowing transcribers to-do their work. The result is then sent to the body-cam provider. All this required a high level of security and the utilisation of best practices.

# SKILLS



Python & Flask JavaScript & jQuery HTML5 & CSS

Angular & Vue.js

BASH & Perl Linux