Saxon Jensen

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Objective

To broaden my knowledge in the field of software engineering. I enjoy problem solving, and seek opportunities to broaden my knowledge.

Education

School, Swan Christian College

- Completed school with DUX, achieving an ATAR of 98.75.
- Achieved highest marks in Mathematics, Physics and Chemistry.

University of Western Australia

- Studied a **Bachelor of Computer and Mathematical Sciences**, majoring in computation and pure mathematics.
- Completed honours level Computer Vision and computational modeling.
- Studied Java Programming, Calculus, Linear Algebra and Statistics with distinction grades.
- Passed C Programming, Web Technologies and Software Engineering with High Distinction grades.
- Studied units in Artificial Intelligence, Data Mining and Geometric Topology

Employment

2011

Tutoring Service

Self Employed High School Tutoring Service

- Involved driving to students homes and tutoring in Maths, Physics or Chemistry up to a second year University level.
- Required careful management of time and resources.

2012-2013

Research Projects Officer

Australian Resources Research Centre, CSIRO

Researched algorithms concerning the automated segmentation of grayscale images.

- Analyzed large Micro CT data sets of porous structures for characteristics useful to researchers, such as porosity and pore distribution, and the connectivity and anisotropy of the pore structures.
- Extensively used the Tool Command Language (TCL) to automate the and control the behavior of existing applications.
- Developed a 'proof of concept' platform that was able to coordinate data input and output across multiple different computer programs, and parsed simple scripts to add logic to a defined workflow.
- Co-authored a paper on the <u>Automated Thresholding and Analysis of Micro CT Scanned Bread Dough</u>.

Nov 2013 - Feb 2014

Google - Front-End Engineering

A summer internship at Google Sydney. I worked on frontend file viewer for Gmail, Drive and other Google services. I designed and implemented significant changes to the UI.

- Using the Javascript Closure library and compiler.
- Work involved designing reusable UI components and systems to translate well to many different languages and be very accessible (screen readers).
- Involved extensive use of JavaScript and the Soy templates.
- System needed to be designed to work well at Google scale, such as reducing the number of requests to servers for Javascript, file data etc. and be accessible to a large number of users (internationalisation, right-to-left languages etc.).

Mar 2014 - June 2015

Full Stack Developer at Gramercy Studios

Mostly front-end work building large web applications and backend systems written in Python.

- Using the Django Python framework for server-side development for a large web application.
- Used various front-end development tools, such as the CoffeeScript compiler, Grunt task manager and SASS stylesheets.
- Designing and implementing large portions of the front-end for a large web application to meet client specifications.
- Extensively used the Backbone Marionette JavaScript framework to design and implement large parts of a web application using an MVC design pattern.

June 2015 - August 2015

Front-end Software Engineering at Facebook

Worked on parts of the Facebook Ads vertical. Work involved extending the ads APIs and user interfaces to expose more powerful options for advertisers.

- Front-end used the React and Flux frameworks to develop UI components that can be reused throughout Facebook.
- Backend written in Hack, an extension to PHP that provides java-like language

- features, like typing, inheritance etc.
- Features added to the Facebook Ads surfaces required consideration of scale. How would features perform with many concurrent users?

August 2015 - November 2016

Embedded Software Engineer at VIX Technologies

Developing embedded software in C / C++ that runs on transit card readers. Software is responsible for reading and writing data to a card and processing business rules.

- Extensive use of the C programming language.
- Working on devices with very limited resources.
- Developed a system in which software on physical card readers could be tested automatically. This was written in Java.
- Embedded software had to interact with servers that processed transactions, passengers etc. This is a large collection of systems that needed to interact in an easily maintainable way.

Skills and Abilities

- Able to use a variety of different programming languages, suiting a given problem.
- Proficient in the use of C/C++, Java, C#, Javascript, Python and multiple other languages to suit a given task.
- Particular experience in front-end web application development.
- Most enjoy creating beautiful and intuitive interfaces for a given solution.
- Great interest in problem solving and formulating algorithms for a given problem.
- Particular interest in pushing what the web can do, working a lot with HTML Canvas graphics and javascript.
- Fast learner, and able to work as part of a large team
- Received my black belt in Karate in 2009

Awards

- Achieved certificates of academic achievement every year 2006 2010.
- Top 10% in the National Science Olympiads, requiring Physics knowledge and skills beyond that which was required at the time.
- Was selected to attend the ANZAS National Science Conference in Melbourne.

Activities

- Compete in programming competitions, including ICPC ACM, Google Code Jam and TopCoder.
- Working with one other developer, we created a multiplayer card game, using Java

for the server-side, and the latest Websocket and Canvas JavaScript API's for the client.

- Placed in the 'top 20' in a 1UP HTML5 Game Development competition.
- Developed and maintained a local town karate club website.
- Helped develop, with a team of five people, a small 'robot' able to map its location and using path-finding techniques to reach a specified destination point. The robot was written in Java and used a set of API's given to us to interact with the robots sensors and motors.
- Received an internship with CSIRO and Ivec Supercomputing, where I got experience in GPGPU computing and using the supercomputer facilities there.
- Co-authored a paper on my work at CSIRO on the Automated Thresholding & Analysis of Micro CT Scanned Bread Dough. The paper is published in the **Journal of Microscopy**.

Referees

I have been advised personal references from Facebook are not available, but they can confirm employment with them.

Joshua Kulesza	Software Engineer	0419942272
Nathan Rozentals	Team Leader @ Vix Technologies	nathan.rozentals@vixtechnology.com +61 (4) 13376843
Shuo Wang	Data Alchemist at Trane Intelligent Services	shuo@shuo-wang.com
Alex Louden	Software Engineer	alex@louden.com