Zachary Forman

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Work Experience

• Google Sydney Chrome

Software Engineering Intern

November 2015 – February 2016

- Improved determinism of Chrome build process significantly, reducing the number of non-deterministic outputs on Linux by tens of thousands.
- Designed and implemented an experimental framework in javascript for learning about the Chrome build.

• Google Sydney Driv

Software Engineering Intern

November 2014 – February 2015

- Designed and implemented an Android application.
- Adapted a pretrained neural network for recognition of a subset of images, with 94% accuracy.
- Worked independently, producing > 5000 lines of high quality code.

• Computer Science Adelaide University
Casual Teaching August 2014 – present

- Taught first year students fundamentals of Computer Science and programming.
- Ran practicals and workshops for first year courses.
- Took tutorials for a first year algorithms and data structures course.

AutoID Labs
 Adelaide

Common Internal 2012 March 2014

December 2012 March 2014

Summer Intern December 2013 – March 2014

- Built and helped design a C++ stream processor that interfaced with pre-existing middleware and machine learning algorithms to generate a stream of predictions.
- Built a visual C[♯] application to interface with RFID readers and provide a stream of tag reports.
- Reference: Dr. Damith Ranasinghe (damith.ranasinghe@adelaide.edu.au)

Leadership

• President of Computer Science Club

Adelaide University

November 2013 – November 2015

- Improved relationship with the Computer Science faculty, leading to increased involvement during Oweek and a large recruitment of first year students.
- Promoted a healthier club environment, which contributed to a more diverse club than in past years.
- Encouraged a culture of excellence within the club, which contributed to a significant number of club members (5+) getting internships at leading tech companies, including Google and Microsoft.

• Peer Mentor

Adelaide University 2014 – Present

- Assisting new students in transitioning to University.
- Running introductory tours and lectures for incoming students.
- Outreach events to high schools.

Core Technical Skills

Language	Years Experience	Technology	Years Experience
C++	3.5	SVN	$\overline{}$
C	3	Regular Expressions	3
Java	2.5	ĿATEX	3
Go	0.5	Git	2
Python	0.75	Android	0.5

Education

• Adelaide University

Bachelor of Engineering (Honours) (Software Engineering) Expected Graduation: November 2016 2013 - Present

- GPA: 6.6/7.0
- Selected key courses:

* Object Oriented Programming (2013 s1)	High Distinction
* Algorithm Design and Data Structures (2013 s2)	High Distinction
* Systems Programming in C and C++ (2013 s2)	High Distinction
* Computer Networks and Applications (2014 s1)	High Distinction
* Artificial Intelligence (2014 s1)	High Distinction
* Operating Systems (2014 s2)	High Distinction
* Event Driven Computing (2014 s2)	High Distinction
* Computer Vision (2015 s1)	Distinction
* Distributed Systems (2015 s2)	Distinction
* Evolutionary Computation (2015 s2)	High Distinction
* Introduction to Statistical Machine Learning (2015 s2)	High Distinction
* Distributed Databases and Data Mining (2016 s1)	Pending
* Mining Big Data (2016 s2)	Pending

- Recipient of Adelaide University Undergraduate Scholarship for outstanding academic merit.

Miscellaneous

- Competitions
 - Google Code Jam 2013-2015 (Qualified)
 - ACM 2015 (2nd place on site)
 - ACM 2014 (3rd place on site)
 - ACM 2013
- Github & Personal Projects

https://www.github.com/ZacharyForman

- Binary Matcher
 - * Tool for analyzing binaries, and potentially doing clever binary diffing.
 - * Learned about ELF file format and how binaries are run on Linux.
- net
 - * C++ wrapper of BSD sockets, and several other utilities for code that interacts with the Internet
 - * Learned more about BSD sockets, and experimented with API design.
- cpu
 - * Instruction architecture simulator for the DLX architecture.
 - * Improved my C programming ability and consolidated my knowledge of DLX.