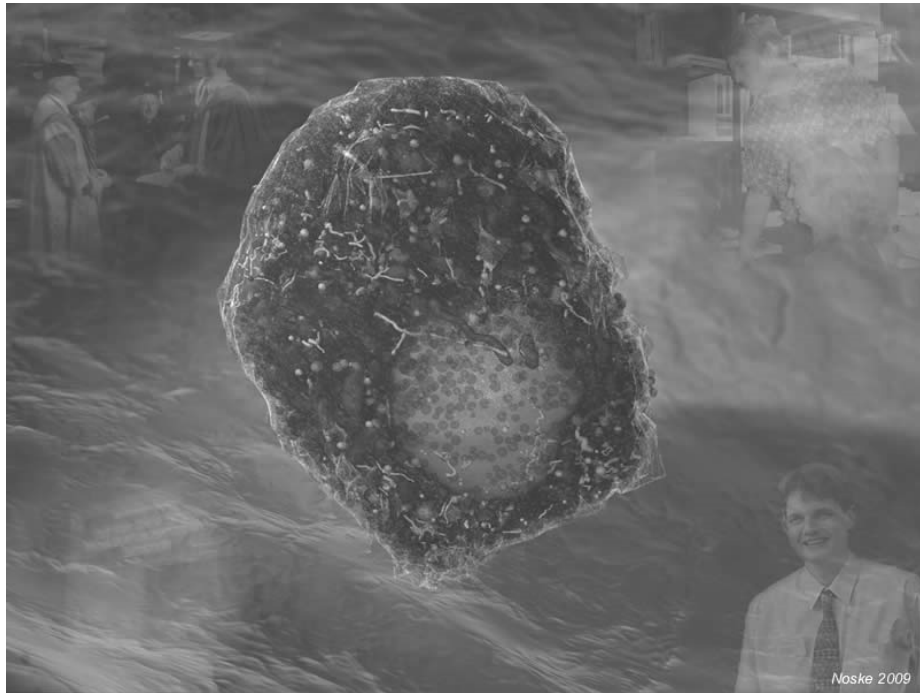


Andrew Noske

Résumé



Last Updated: 9/9/2013

*NOTE: Since starting work at Google I have **stopped using this document**, but have left it online for historical purposes. I will keep adding to it slowly, but this resume is far longer than any resume I'd burden on anyone. You can see my one page resume at:*

<http://www.andrewnoske.com/professional/downloads.php?datecv=9/9/2013>

Personal Information:

- **Name:** **Dr. Andrew Brett Noske**
- **Residential Addr:** **** (confidential over the web), Mountain View, CA 94040
- **Mobile:** (858) 349 2901
- **E-mail:** andrew.noske@gmail.com
- **Date of Birth:** 18th March 1983

Professional Objective:

To utilize all my current skills, particularly my creativity, as an employee in the computer industry or researcher in computational biology. To work smart, settle only for my personal best and take full advantage of any opportunities to learn new skills. I have a great interest in lecturing, but also want to expand my experience in research and industry.

Education:

2005-2009 → PhD in Computational and Cell Biology The University of Queensland (UQ), Brisbane

Completed a PhD at the Institute for Molecular Bioscience (IMB) at UQ in receipt of an Australian Postgraduate Award (APA) scholarship (2005-2009).

Thesis: “*Multi-scale, spatio-temporal analysis of mammalian cell tomograms*”

Topic: A multi-disciplinary project combining computer science and image processing with cell biology, electron tomography and structural biology, as part of a larger "Visible Cell" project at UQ.

2001-2004 → Bachelor of Information Technology with Honours James Cook University (JCU), Cairns

Completed Bachelor of IT (Professional Strand) with Class 1A Honours at JCU in Dec 2004 in receipt of:

- Faculty of Science and Engineering Scholarship (2001)
- Software Engineering Australia (SEA) Scholarship (2001)
- Bioinformatics Honours Scholarship JCU (2004)
- University Medal (2004)

Thesis: “*Efficient Algorithms for Molecular Dynamics Simulations*”.

Overall GPA:**6.844** on a 7.0 scale

Result for Honours:**Class 1A**

Honours Year Results:

Honours Project (full year course).....HD
Computer Science Theory Topics.....C
Topics in Systems and Networks.....HD

Literature Review and Research.....HD
Scientific Research MethodsHD

Third Year Results:

IT Project 1HD
Internet TechnologyHD
Advanced Database Management.....HD
Discrete Mathematical FoundationsHD

IT Project 2.....HD
Fundamentals Software Engineering.....D
Object Oriented Software Engineering .HD
Computer GraphicsHD

Second Year Results:

Internetworking 1HD
Object Oriented Programming.....HD
Operating Systems.....HD
Data CommunicationHD

Internetworking 2HD
Data Structures & AlgorithmsHD
Computer ArchitectureHD
Advanced MultimediaHD

First Year Results:

Intro. to Computer Science 1HD
Intro. to Information SystemsHD
Intro. to Information TechnologyHD
Mathematical FoundationsHD

Intro. to Computer Science 2.....D
Effective WritingD
Intro. to MultimediaHD
Statistics and Data AnalysisHD

1996-2000 → Smithfield State High School (SSHS), Cairns

Senior Certificate

- Overall Position**2** (top 8% of state)
- QCS Result**A**
- Field Positions**10** (top mark) for all fields

Senior Exit Statement:

English.....VHA[^]
Mathematics B.....VHA[^]
ChemistryVHA[^]
Physics.....VHA[^]

Information Technology.....VHA[^]
Engineering TechnologyVHA[^]
Graphics (one semester off-line)VHA[^]
[^] = *subject dux*

1987-1995 → Nakara Primary School, Darwin

Work Experience:

NOTE: I have marked my most notable work experience and achievements with this symbol: *

- 2012-current** **Software engineer** at Google, Mountain View, working on Google Maps. ***
- 2010-2012** **Postdoctoral employee** at the The National Center for Microscopy and Imaging Research (NCMIR) at the University of California, San Diego. **
- 06-07/2006** **Game development** - designed an educational 3D game for Brad Marsh.
- 03-10/2004** **Part-time tutoring** at James Cook University, for the following subjects: “Software Engineering” (2004 sem1), “Object Oriented Software Engineering” (2004 sem2), “Computer Graphics” (2004 sem2). **
- 03-10/2003** **Part-time tutoring** at James Cook University, for the following subjects: “Multimedia 2” (2003 sem1), “Internetworking 1” (2003 mid-year block), “Internetworking 2” (2003 sem2). **
- 03/2004** **Web form development** - created a multi-page web survey for Lyn Courtney, in charge of the JCU Mentors program.
- 01-03/2003** **Web designer** - designed dynamic website for Queensland Senator Jan McLucas, Cnr Shields and Grafton Sts, Cairns. **
- 01-02/2003** **Web animator** - designed Flash animations for Tescorp, Cairns.
- 01/2002** **Fuel attendant** at Clifton Beach Village, Captain Cook Highway, Cairns.
- 10-12/2001** **Data entry** for URS Australia.
- 08/1999** **Work experience** assisting at Flanagan Consulting Group, Cairns.
- 1990-1999** **Casual field assistant** – mammal trapping, bird netting, fish collecting and animal spotlighting for scientific surveys for K. Martin (environmental consultant).
- 01-05/1997** **Casual laboratory assistant** – fish survey and sorting aquatic macro invertebrates under microscope for S. Barclay.

Awards and Achievements:

General Academic:

- **2008** • Biochemical Journal Young Investigator Award (*for best presentation at Queenstown Biology Meeting*) **
- **2007** • Runner-up for Olympus Life Science Postgrad Travel Award
- **2007** • One of three finalists for Roche Award for Postgrad Career Development *
- **2005** • Offered APA Scholarship at UQ – accepted ***
- **2005** • Offered APA Scholarship at JCU, QUT and UNSW, with Vice Chancellor’s top-up at QUT and top-up at JCU – not accepted
- **2004** • Awarded University Medal (JCU) ***
- **2004** • Don Close Medal for Science, Engineering and Information Technology (*for best results & community service in the Faculty*) ***
- **2001** • UNSW – Computer Science Co-op Scholarship finalist *
- **2001** • Software Engineering Australia (SEA) Scholarship **
- **2002** • Became member of Golden Key society (*offered to top 15% of students worldwide*)
- **2001** • JCU – Faculty of Science and Engineering Scholarship – accepted ***
- **2000** • SSHS – *Subject Dux* – IT, Engineering Technology, English, Mathematics B, Physics *
- **1997-2000** • SSHS Year Level Dux – Grade 9 (1997), Grade 10 (1998) & School Dux (2000) **
- **1996-2000** • SSHS – Award of Excellence for Academic Performance
- **1997** • Academic Scholarship to Trinity Anglican School Cairns 1997-2000 – not accepted

Science:

- **2011** • Winner and top 10 for the video and illustration categories of the NSF International Science & Engineering Visualization Challenge. *
- **2000** • Certificate of Merit in BHP Science Award (technology section)
- **2000** • Silver CREST Award (CSIRO) *
- **1999** • Entrant in the 1999 Rotary National Youth Science Forum
- **1999** • Finalist (one of 16) in the 1999 BHP Science Awards **
- **1999** • Australian nominee (one of three) for Stockholm Junior Water Prize *
- **1998** • Spaghetti Bridge Building competition, Cairns Show (4th place)
- **1994-1999** • Australian Schools Science Competition – 1994 (Credit), 1995 (Distinction), 1996 (Credit), 1997 (Distinction), 1998 (Distinction), 1999 (Credit)

Information Technology:

- 2004 • Don Close Prize in Software Engineering *
- 2004 • Hunter Medal in Computer Science **
- 2004 • Bioinformatics Honours Scholarship JCU – accepted *
- 2001 • JCU – Software Engineering Australia (SEA) Scholarship – accepted *
- 2000 • Finalist Far North Qld & Business Liaison Assoc. IT Awards for Grade 12
- 1999 • Finalist in Asia-Pacific Qld IT&T Awards
- 1999 • Web Page Design Competition (Business Liaison Assoc. Inc, Cairns) – 3rd place

Mathematics:

- 1994-2000 • Australian Mathematics Competition for Westpac Awards – 1994 (Distinction), 1995 (Distinction), 1997 (Distinction), 1998 (Distinction), 1999 (Credit), 2000 (Distinction)

English:

- 2000 • Dorothea Mackellar National Poetry Competition for Schools – Highly Commended *
- 1997-1999 • Australian Schools English Comp. – 1997 (Credit), 1998 (Distinction), 1999 (Credit)

Community Service:

- 2008 • Organized and hosted the first IMBcom Great Debate – *a comic debate attended by ~150*
- 2007 • Secretary for Students of the Institute for Molecular Bioscience Assoc. (SIMBA)
- 2005-2006 • Webmaster for SIMBA student club at UQ
- 2006-2007 • Treasurer for UQDance club at UQ – *helped increase membership from 160 to >800*
- 2004 • Mentor in JCU's Student Mentoring Program **
- 2003 • Secretary of Cairn's JCU computer club
- 2002-2004 • Student Rep for 3 undergraduate JCU computing subjects & 2 postgraduate subjects
- 2000 • Senior First Aid Certificate (St Johns Ambulance)
- 2000 • SSHS School Captain – School Captain's Trophy *
- 1997-2000 • SSHS – Award of Merit for Community Service – 1997, Award of Excellence for Community Service – 1998, 1999, 2000
- 1996-2004 • Assistance with SWAD (Students With A Disability) & YAAFA (Young Adults Aiming for Acceptance) (local social group for intellectually disabled) *
- 1995 • Australia Day Council, Northern Territory Inc – Student Citizen Award
- 1995 • Nakara Primary School – Citizen of the Year Award (Year 7)

Culture:

- 2000 • SSHS – Apex Cultural Award shield *
- 1997-2000 • SSHS – Award of Merit for Cultural Activities – 1997, Award of Excellence for Cultural Activities – 1998, 1999, 2000
- 1995 • North Australian Eisteddfod; Highly Commended in woodwind (saxophone) solo
- 1994 • Australian Music Examinations Board; 'A' grading in Preliminary Grade Pianoforte

Other:

- 1998 • Royal Life Saving Society Australia – Bronze Medallion
- 1993-1997 • Tennis Trophies – Most Improved 1993, Competition Premiers 1995
- 1995 • Special Award – Tournament of the Minds – NT Dept Education

Participant in:

- 2007 • IMBcom BioBusiness Retreat/Commercialization Workshop
- 2000 • SOCOG (Organising Committee for the Olympic Games) Youth Ambassador
- 2000 • Great Debate for Qld Council of Parents & Citizens Assoc. (QCPCA) State Conference
- 2000 • Student Support Team and Guardian Angels Program SSHS
- 2000 • Lions Youth of the Year Quest – Zone finals
- 1998-2000 • FNQ Eisteddfod – Saxophone Ensemble – 1998, 1999, 2000
- 1996-2000 • SSHS Concert Band 1996-2000, SSHS Stage Band 1998-2000 *
- 1998 • The Siemens Science Experience (*for Year 10 students at JCU*)
- 1998-2000 • SSHS Student Council *
- 1998-1999 • Schools Debating Competition *
- 1999 • AYDP Student Leadership Conference, Townsville
- 1999 • QANTM Cybercamp, Tropical North Queensland Institute of TAFE *
- 1999 • BHP Science Camp, Melbourne

Highlighted Publications:

- **AB Noske**, AJ Costin, GP Morgan and BJ Marsh. Expedited approaches to whole cell electron tomography and organelle mark-up in situ in high-pressure frozen pancreatic islets, (2007) *J Struct Biol.* 161:298-313.
- **AB Noske**, BJ Marsh. Mapping the beta cell in 3D at the nanoscale using novel cellular electron tomography and computational approaches. (2011) *BetaSys - Systems biology of regulated exocytosis in pancreatic beta cells.* Springer-Verlag. Chapter 9.
- T McComb, O Cairncross, **AB Noske**, DL Wood, BJ Marsh and MA Ragan. Illoura™: a software tool for analysis, visualization and semantic querying of cellular and other spatial biological data. *Bioinformatics.* 25:1208-1210.

Invited Reviews:

- BJ Marsh and AB Noske. New views on old questions: Insights into beta cell function from 3D structure studies combining cellular tomography with computational biology. *Diabetes.*

Websites:

- <http://www.andrewnoske.com/> - More of a personal site than anything else; includes much of my project work and resources for the benefit of IT students.
- <http://www.andrewnoske.com/wiki/> - My own wiki site and “online notebook”, featuring numerous articles on computer programs, programming tips and generic advice.

For a full list of my experiences and achievements in IT, download a copy of my “IT Portfolio” document from: <http://www.andrewnoske.com/professional/downloads.php>

Personal Interests:

Computers Computer programming, making games, graphics design & web site design
Environment Wildlife viewing, animal spotlighting, hiking & aquarium fish collecting
Sports Soccer, tennis, squash, yoga, jogging, touch football & broomball
Other Dancing (Latin & modern), drawing, music, playing saxophone & guitar

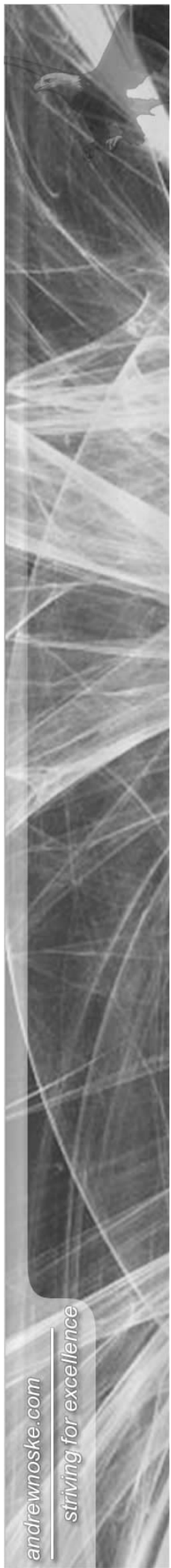
References:

- Mr Jeremy Pack, Techlead for Bestview in Google Maps, (425) 296-9774.
- Dr Steven Peltier, NCMIR Project Manager, (858) 534-0276.
- Dr Brad Marsh, Group Leader and Senior Research Fellow at IMB, UQ, (07) 33462018*.
- Dr Phillip Musumeci, Former Head of School of IT, JCU, (07) 40552265*.
- Mr L Gallagher, Former Principal, SSHS, (07) 40556604*. {*if outside Australia dial: +61 7}

For a collection of written references see: <http://www.andrewnoske.com/professional/references.php>

Software Skills Matrix:

Proficiency		Software	Comments and Examples of Use
<i>excellent↔limited</i>			
Graphics, Web Design, Sound and Animation Programs:			
X		Adobe Dreamweaver	<i>I use Dreamweaver for most of my personal web design.</i>
X		Adobe Photoshop	<i>Have written several of my own scripts, macros and visual basic interfaces which interact with Adobe Photoshop.</i>
X		Adobe Illustrator	<i>Use to produce figures for scientific publications.</i>
X		Adobe Fireworks	<i>My favourite program for rapid graphic design projects.</i>
	X	Adobe Premier	<i>Produced several promotional videos during PhD.</i>
X		Adobe Flash	<i>Is one of my strongest programs, and enjoy ActionScript. Produced: several interactive games & websites.</i>
	X	Adobe Captivate	<i>I'm a big advocator and producer of video tutorials, but prefer screenr.com, Camtasia Studio and Snapz (for Mac).</i>
	X	Adobe Director	<i>Produced: simple shockwave games & an interactive portfolio.</i>
X	X	Cinema4D	<i>Produced: many cell animations, have coded my own COFFEE and C++ Cinema 4D plugins to accelerate the design process.</i>
	X	3D Studio Max	<i>Have created several models, some featured on the cover page.</i>
	X	AutoCAD	<i>Back in undergrad: used to design and build benches.</i>
	X	Amira	<i>Started with this and Imaris (similar program) only recently.</i>
	X	QuickTime Pro	<i>I often use QuickTime to create, combine and export .mov files.</i>
Programming Languages:			
X		C/C++	<i>I have over 7 years experience with C++ (and OpenGL). Produced: "3D dance factory program" and did all my PhD programming in C++. I have become proficient with Qt (Qt framework) and wxWidgets. Most recently: Have earned "C++ readability" at Google.</i>
	X	C#	<i>Quite a nice language actually - nicer than Java.</i>
X	X	JavaScript, HTML, CSS	<i>Have designed many websites with JavaScript and CSS. Have earned JavaScript readability and use "Google Closure" (similar function to JQuery) at Google.</i>
X	X	PHP	<i>Despite its security flaws I have a soft spot for PHP.</i>
	X	JSP	<i>Tutored how to setup/use Apache Tomcat.</i>
	X	MySQL	<i>Most recently have been playing with spatial dataset structures/geographic information systems using postGIS in PostgreSQL.</i>
	X	Go	<i>Have written some code for Google logs analysis in Go.</i>
	X	Python	<i>Used for our system monitoring code for Google Maps, hope to use more soon.</i>
	X	Octave	<i>Did a Stanford online machine learning course where I learnt Octave and wrote up a wiki page on Octave and R.</i>
X	X	Visual Basic	<i>Not a fan on VB, but have used in the past to produce a memory board game and "exam creator" program.</i>
X		VB 6 Macros	<i>Saved countless hours during my honours by writing my own Macros for Word, Excel and even PowerPoint (long time ago).</i>
X	X	Java	<i>Great idea, although slow and can be nasty to setup.</i>
Programming Environments:			
	X	Eclipse IDE	<i>I use Eclipse as my primary IDE at Google.</i>
	X	.NET Environment	<i>I'm a big fan of code folding, so often use this for C# and C++</i>
	X	Visual Studio 6	<i>Used throughout undergrad - especially MS Visual C++ 6.</i>
	X	X Code	<i>Used to create two GUI program and several C++ plugins for IMOD.</i>



Operating System Environments:					
X				Linux – Ubuntu	<i>Is what we use at Google. During my postgrad we use some Red Hat.</i>
X				Unix shell/terminal	<i>I know all the basic text-based commands, but am by no means an advanced user when it comes to administration.</i>
X				Mac OS X	<i>In my PhD program all my co-workers used Macs so I now very comfortable with Macs for processor intensive tasks and often program using XCode. Very nice operating system.</i>
X	X			Microsoft Windows	<i>Experience with Windows 98, 2000, XP and Window 7.</i>
Version Control System:					
	X			CSV	<i>Used for years to contribute code to an overseas collaborator.</i>
		X		Mercurial	<i>Find very cumbersome, so not my favourite versioning system.</i>
	X			Subversion	<i>Used to manage my own code.</i>
		X		MS Visual Source Safe	<i>Have had bad experiences with this – CVS is better.</i>
Other:					
X				Google Doc Products	<i>Instead of using Word anymore, we mostly use Google drive products at Google and I can definitely see the advantage. Most of our work here is collaborative, so this is essential.</i>
X				KeyNote	<i>KeyNote is easy to use and superior to MS PowerPoint. If I have an Apple I enjoy making templates and stunning slideshows in KeyNote.</i>
		X		Google Docs	<i>Big fan of Google docs for shared documents.</i>
X				MediaWiki	<i>Setup my own MediaWiki site where I've written over 300 articles. Other wiki systems I have experience setting up are: Google Sites & Atlassian Confluence.</i>
X				IMOD	<i>IMOD is a set of image processing, modelling and display programs used for 3D data, including electron tomography reconstructions of serial sections.</i>
		X		SerialEM	<i>SerialEM is a control program for Transmission Electron Microscopes by the same authors responsible for IMOD.</i>
		X		Unity 3d	<i>Have started using the Unity 3D game engine/IDE to create 3d games for the browser and smart phones.</i>
		X		AutoHotkey	<i>Very useful for automation of repetitive tasks.</i>
			X	MatLab	<i>Little experience so far, but put it here as I'm eager to learn.</i>
Microsoft Office Applications:					
X				MS Word	<i>A proficient user and write my own Macros.</i>
X				MS Excel	<i>I use Excel frequently to analyse data, and sometimes find it useful for drawing large, complex diagrams.</i>
X				MS PowerPoint	<i>Enjoy giving great presentations.</i>
X				MS Access	<i>Familiar with DB queries, creating VB form etc.</i>
	X			MS Publisher	<i>Useful for producing quick-and-dirty flyers, cards etc.</i>
	X	X		MS Visio	<i>Not a bad program for drawing schematics.</i>
	X			MS Project	<i>Drawing Gantt charts is definitely a good habit to get into.</i>