

# Curriculum Vitae

Nathan Keilar  
C/o Angie Reeve  
28 Ruth St  
Highgate Hill QLD 4101  
Australia

Mobile +61 (0) 413 381 270  
E-mail nathan.keilar@madteckhead.com

---

## OBJECTIVE

I am looking to obtain employment in a team environment that will utilise my graduate skills, and offer opportunities for promotion and positive contribution to society. I am especially interested in distributed energy and energy efficiency with a goal to contribute to better electricity generation, conversion, conservation and distribution. I would however be pleased to occupy any graduate role that will further develop my knowledge and skills, and enable me to contribute to the overall goals of your organisation.

## TECHNICAL SUMMARY

<b>Hardware Design Tools</b>	SPICE , Oscilloscope, Spectrum Analyzer, Power Meter, Signal Generator, COMSOL Multiphysics
<b>Methodologies</b>	Schematic Capture, PCB Layout, EMI Reduction, FEM, OOP, RTOS, Software/Hardware/Product/Business (Development) Lifecycles.
<b>Programming Languages</b>	C, C++, Java, Perl, Assembly Language, ACK, SED, Shell Scripting, National Instruments LabView. Java Agent Development Environment
<b>Software</b>	Open Office, Microsoft Office, MATLAB, Twiki, dotProject, Wordpress, Drupal, ,
<b>Platforms</b>	Windows 2000 / XP / Vista, UNIX, Linux, Mac OS X
<b>Embedded Systems</b>	Freescale Semiconductor HCS12/MC9S12, Texus Instruments C6711 DSK
<b>Databases</b>	MySQL
<b>Webservers</b>	Apache
<b>Knowledge Areas</b>	<p><i>Core:</i> multi-agent systems, distributed control, renewable energy technology, integrated electronics, power electronics and electric machines, transmission lines, microprocessor techniques, communications systems and circuits, computer modelling techniques in engineering, unix based engineering, computer communications and networking, data communications, advanced digital signal processing, advanced computer systems, digital control systems engineering, image processing and machine vision, neural networks, website development, concurrent engineering, product development, business finance, human resources.</p> <p><i>Other:</i> cell and molecular biology, energy issues, environmental advocacy, food politics, permaculture design, private investigation, facilitation techniques, strategising for change, decision making &amp; group processes.</p>

## EDUCATION

Semester 1 2009	<b>Academic exchange / Honours Thesis, Helmut Schmidt University, Hamburg, Germany</b>
Semester 3 2008	Academic exchange / Work Experience, Gifu University, Japan
Since 2003	<b>Bachelor of Engineering in Microelectronic Engineering, Griffith University, Australia</b> Major: <i>Computer Systems</i> , Minor (Unofficial): <i>Communication Systems</i> Expected graduation: July 2009 Grade Point Average: 5.5/7 (see attached academic transcript) Key skills: research, analytical and problem-solving, ability to plan and meet deadlines, report writing.
Semester 1 2007	<b>Academic exchange, University of Tübingen, Germany</b>
2002	Certificate in Micro electric Engineering, Griffith University, Australia
1996 – 2001	Somerset College, Gold Coast, Australia
1994 – 1997	<b>Benowa High Electronic Club</b> (Extra-curricular), Gold Coast, Australia
1990 – 1995	Robina State Primary School, Gold Coast, Australia

## PROFESSIONAL EXPERIENCE

# Curriculum Vitae – Nathan Keilar

- Mar 09 – Present  
5 days / week
- Prof. Dr.-Ing. habil. Detlef Schulz, Industry Project & Honours, Helmut Schmidt University, Germany**  
Research & Development, Project Manager
- Research and technology development to achieve high penetration of distributed generation into the German power grid using decentralised network and control.
  - Design and Analysis methodology selection
  - Simulation framework development– Matlab & multi-agent system simulation tools
  - Liaised with client and university advisor
  - Presentation of results as a thesis and visual and oral presentation
- Nov 08 – Feb 09  
5 days / week
- Prof. Naosiko Yasuda, Gifu University, Gifu, Japan**  
Research & Development, Project Manager
- Research and technology development – distributed power network concepts
    - Literature research – distributed control techniques, multi-agent systems, power flow balancing, market based resource optimisation
  - Simulation design – implementation of market based multi-agent systems in Java
- Jul 08 – Nov 08
- Griffith Innovation Challenge (Business Plan Competition), Griffith University**  
Winning Team Leader, Project Manager
- Engineering, Environment and Science Group Winner.
  - Established systems for online, group collaboration
  - As team leader, was required to interview candidates and select suitable team members.
  - Held primary responsibility for ensuring team progress and motivation
- Jul 08 – Nov 08  
3 days / week
- Dr Jun Wei Lu, Griffith University, School of Engineering**  
Research Assistant, Work Experience
- Research and technology development – advanced power converter techniques
    - Literature research – very and ultra high frequency inductor, transformer, gate driver design for use in solar energy power systems.
- Jan 05 - Nov 05  
2 days / week
- Australian Student Environment Network**  
Queensland Network Convenor, Volunteer
- Organised meetings and activities
  - Establish and maintain contact with students from environment collectives and organisations at regional universities in Queensland
  - Liaised with coordinators in other states
  - Communicated with other environmental organisations in Queensland
  - Maintain effective communication between members and relevant organisations.
- July 05 - July 06  
10 hrs / week
- Students of Sustainability Conference, Brisbane, 2006**  
Organiser, Volunteer
- Managed website development and online registration process.
  - Managed conference media needs
  - Managed online multimedia of conference proceedings.
  - Volunteer management
  - Collective organising; consensus decision-making, facilitation.
  - General organising tasks
- Nov 05 – Dec 05
- Airweb Connect (Internet Provider), Gold Coast, Australia.**  
Pre-installation site surveying
- Assessing client site for suitability of radio link.
  - Establishing connection and evaluating quality.
- Nov 04 - May 06
- Friends Of the Earth, Brisbane, Australia.**  
Director, Energy Policy Campaigner, Volunteer

# Curriculum Vitae – Nathan Keilar

- National energy policy research and development
- Submission and presentation for Productive Commission on National Energy Efficiency
- Introduction evenings

Mar 04 – Nov 06  
3 days / week

**Griffith University Organic Food Co-operative**, Brisbane, Australia.  
Home Delivery Service Manager, Communication Officer, Volunteer

- Home Delivery Service Manager
  - Volunteer coordinator and scheduling
  - Activities coordination and optimisation
  - Identify and implement improvements to system operations
  - Handling money and managing finances
- Communications Officer
  - Development of website with online ordering capabilities
  - Maintain member and supplier relations
  - Regular newsletter publications

1998 – 2001

**Cash Converters TM**, Gold Coast, Australia  
Sales Attendant, Part-time & Vacation work

- Store and feature product displays
- Operating till and EFTPOS systems
- Sale of goods
- Service of goods to ensure fitness for sale

1997 - 6 weeks

**Gold Coast Quality Computers**, Gold Coast, Australia  
Computer Technician, Website Design

- Building and repairing computers
- Website design

## OTHER TRAINING

2008 Effective Business Planning and Communication workshop series, Griffith University, Australia  
2008 – 2 day Introduction to Permaculture Design, North Street City Farm, Brisbane, Australia  
2006 Food Politics (Elective), Griffith University, Australia (Unofficial)  
2005 Environmental Advocacy and Campaign Strategy  
2005 – 3 days Private Investigation Course, ADF Investigations, Brisbane, Australia  
2005 – 3 days Facilitation Techniques, Strategising for Change, The Change Agency, Brisbane Australia  
2004 Cell and Molecular Biology (Elective), Griffith University, Australia  
2004 Introduction to Renewable Energy Technology (Distance), Brisbane North Institute of TAFE, QLD, Australia  
2003 Life, Universe and Everything (Elective), Griffith University, Australia  
(Intro to Neuro Science & Genes, Quantum Mechanics, Relativity & Cosmology)

## LANGUAGES

English	Fluent	Native Speaker
German	Basic	Studied in Germany for eight months.
Japanese	Basic	Studied in Japan for three months after domestic course.

## MEMBERSHIP & COMMUNITY INVOLVEMENT

Since 2003 IEAust (Student)  
Since 2004 Griffith University Food Co-operative  
Since 2004 Friends of the Earth, Australia  
Since 2005 The Australian Student Environment Network

## PERSONAL INFORMATION, HOBBIES & INTERESTS

- Age: 25
- Drivers License
- Hard Working, Reliable, Motivated.

## Curriculum Vitae – Nathan Keilar

- Independent travel

11/2004 - 01/2005	Australia – NSW, Vic
01/2006 - 02/2006	Australia – NSW, Vic, SA, NT
11/2006 - 03/2007	Overland trip from Singapore through Malaysia, Thailand, Laos, China, Russia, Latvia, Lithuania, Poland to Germany.
11/2007 – 02/2008	Overland through India.
12/2008 – 01/2009	Overland through southern Japan.
06/2009 – 31/2009	Overland through Europe.

- Hiking, photography, camping, Programming, cycling, reading, clean/green technology, renewable energy, open source software, open design hardware, learning languages, volunteering and meeting new people.
- Over the past three years I have pursued my passion for photography abroad. Travelling through Asia and Europe. These experiences have aided me in developing an open mindset, and deeper understanding of border affairs.

# Curriculum Vitae – Nathan Keilar

## REFEREES

- Professor Ljubo (Ljubisa) Vlacic FIEAust FIEE SMIEEE CPEng RPEQ CEng(UK)  
Director, Intelligent Control Systems Laboratory  
Faculty of Engineering and Information Technology  
Griffith University, Brisbane, QLD 4111, Australia  
Tel. +61 7 3735 5024 / E-mail: L.Vlacic@griffith.edu.au
- Dr. David Rowlands (ECE)  
Griffith School of Engineering  
Griffith University, Brisbane, QLD 4111, Australia  
Tel. +61 7 373 55383 / E-mail: d.rowlands@griffith.edu.au
- Dr. Junwei Lu, Associate Professor  
Griffith School of Engineering  
Griffith University, Brisbane, QLD 4111, Australia  
Tel. +61 7 3735 5118 / Fax. +61 7 3875 5384 / 3G Mobile: 0433 136 888 / E-mail: J.Lu@griffith.edu.au