nerdErg

harness the power of the nerd.

1.1 Contact Details

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1.2 Education/Qualifications

Institution: University of Canberra
City/Country: Canberra/Australia
Qualifications: Bachelor Applied Science in Electronics
Completed: 1989
Skill Set: (Alphabetic order)

- Audio/Sound Engineer
- Electronics Engineer
- People/Project/Business Management
- Network/Systems Administrator
- Software Engineer
- Web Design

1.3 Skill Summary

Non Technical Skills:	Good written and Oral Communication, Presentation, Business Management, Project Management, Team Management.	
Advanced Software Engineering Skills: (Alphabetic order)	✔ Assembler ✔ AngularJS ✔ Basic ✔ C ✔ C++ ✔ CORBA ✔ Delphi ✔ D/X/HTML/CSS ✔ Java (J2SE, JEE, Groovy, Grails, Griffon) ✔ Javascript, JQuery ✔ Linux	✔ MS DOS ✔ MS Windows ✔ Pascal ✔ PHP ✔ Shell Scripts ✔ Spring ✔ SQL ✔ TCP/IP ✔ Networking ✔ UNIX ✔ Web frameworks (Spring, Webwork, Struts etc.)
Electronics Engineering Skills: (Alphabetic order)	✔ Analog circuit design ✔ Audio systems ✔ Control systems ✔ Digital circuit design ✔ Microcontroller programming ✔ PAL/Gate array design/programming	✔ PLC programming ✔ PWM/ switch mode design ✔ Schematic and PCB design (Mainly used Protel) ✔ VLSI design (bit out of date)

Non Technical Skills:	Good written and Oral Communication, Presentation, Business Management, Project Management, Team Management.
Audio Engineering Skills	✔ 23 years professional experience as a sound engineer working on large event live outdoor shows, including being senior system engineer for The PA People in Sydney working on Carols in the Domain incorporating National OB via the ABC, and a live audience of 100,000. ✔ System design ✔ Mixing ✔ Studio and live recording ✔ Trouble shooting/repair ✔ Acoustics management and design solutions ✔ Event management

1.4 Employment History

CEO nerdErg Pty Ltd (nerderg.com)

Start Date: July 2012
End Date: Current
Position/Title: CEO nerdHerder
Responsibilities/ Achievements:

- Everything
- Employ staff and Company Stuff.
- Saw the release and hand over of the eGrants system for ACT Legal Aid Commission.
- Started working with the ACT Legal Aid Commission towards developing a specification and framework for implementing a whole of organisation integrated Management Information System (LAMIS).
- Released Good Form grails plugin.
- Research and development work fro Lintek Pty Ltd.

Independent Software Developer (nerderg.com)

Start Date: June 2009
End Date: June 2012
Position/Title: Sole Proprietor
Responsibilities/ Achievements:

- Everything (including child care)
- Completely redeveloped the Living Collections management web application in Grails connecting to an Oracle Database with historic legacy data for the Australian National Botanic Gardens
- Developed the eGrants Grant portal web application for the ACT Legal Aid Commission. This included project specification of scope, project management and Agile development of eGrants from scratch.
- Conceived and developed the One Ring scripting rules engine service as an open source project, used by ACT Legal Aid and many others.
- Developed the technology behind the Good Forms grails plugin (to be released as an Open Source project)
- Developed and released the GSParse grails plugin.
- Developed and released the nerdErg Form Taglib grails plugin.
- Developed and release Groupie web site application (WCMS).
- Research and development work on plating for Lintek Pty Ltd.
- Implement a new email system and web site with online quotes for Lintek Pty Ltd.
- Resurrect/rebuild an Automatic Optical Inspection System replacing the Sun Server and updating the operating system, then inspecting and adjusting the equipment for Lintek Pty Ltd.

Atlassian Software Systems Pty Ltd. (www.atlassian.com)

Start Date: August 2007
End Date: June 2009
Position/Title: Software Engineer (Contract)
Responsibilities/ Achievements:

- Design/Develop “Crucible” A code review tool.
- Released Crucible 1.1.2
- Released Crucible 2.0

Cenqua Pty Ltd (www.cenqua.com)

Start Date: September 2005
End Date: July 2007
Position/Title: Software Engineer (Contract)
Responsibilities/ Achievements:

- Design/Develop “Crucible” A code review tool, as part of a small team.
- Released Beta of Crucible June 2006
- Released Crucible 1.0, 1.1

Newton Pty Ltd (newton.com.au)

Start Date: June 1995
End Date: September 2005
Position/Title: Engineering Manager
Responsibilities/ Achievements:
(Brief)

- Completed design, construction and testing of Acoustic Treatment, and replacement of audio facilities in 18 committee rooms of Parliament House Canberra. This included C++ programming for control systems, design of systems using Peavey Media Matrix. Project managed the reconstruction of four audio control rooms, and modifications of another 4.
- Designed, programmed and implemented a system incorporating the Peavey

Media Matrix to control Public Address for the new QANTAS terminal in Sydney.

- Designed and wrote control system for Lintek to control automatic Printed Circuit Board plating line. Using Delphi and Interbase to write an SQL database driven control system that communicates between programs using TCP/IP.
- Designed the Microcontroller and analog electronics and wrote both controller software in Assembler and front end software in Delphi for high current rectifiers for the plating process.
- Designed and implemented the PC based I/O control interface to drive the Gantry system utilizing rotary encoder feedback real time under windows 95 (!) using Delphi and Assembler.
- Designed and wrote the Newton Automatic Broadcast System in Delphi and C++, Utilizing Paradox database tables and DirectX, to interface (TCP/IP) with a Motherwell Systems control system using GEC PLCs to make automatic Public Address announcements at the Boa Shan Steel works and port in China. The system has been operating continuously and reliably since early 1997.
- Project Manager to convert large Win 3.1 application to NT4.0 for NCA
- Designed and implemented a control system for induction heaters that produces the full quadrature PWM output required via PIC microcontroller. Designed and wrote front end PC based control software in Delphi for that system. *Designed implemented and wrote PIC code in C for a keypad interface.
- Designed the Audio visual system for CSIRO Discovery. Designed implemented the Crestron Touch panel interface for the this system.
- Conceived, designed and implemented the Newton 476 Audio Flexamp, and 538 Video Flexamp.

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Responsibilities/ Achievements:
... Continued
Newton Pty Ltd

- Designed, implemented and maintain the Newton Web Site(s). Including Java, HTML, Javascript, PHP, SQL (postgresql).
- Conceived, designed, project managed and wrote software in Delphi and C++ for Newton's Envoy, a networked distributed background music and P.A. System.
- Conceived, designed Newton David digital audio power amplifier utilizing high speed high power Pulse Width Modulation techniques and micro-controller system.
- In charge of a staff and contractors involved in R&D and installation projects.
- Wrote manuals, specifications, tenders, advertising material, brochures, press releases, quality assurance procedures.
- Did voice over advertisements for Woden Plaza, and Newton.
- Conceived, designed and implemented Newton e.envoy distributed multimedia display featuring content independent architecture. This system is written in Java using CORBA, with C++ modifications to open source software. The system works on both Linux and Windows with the Digital Polymedia Engine (like a set top box) running Linux. I highly customised the Linux installation to optimise performance. The fully object oriented design includes custom XML for producing loadable Layouts, scalable cascadeable (n tier) CORBA based servers for running sequences and time based actions on 1000's of eBrowse servers. The servers are based on SQL via JDBC on Posgresql databases.
- Designed, Constructed, and Administered Newtons Network and services including Web servers, DNS, Email (including spam/virus filtering etc.), Private LAN, DMZ , and Public network. Built and Administered two routers based on

Linux connected to a fibre 2Mbps network links with fail-over redundancy.

- Implemented Satellite Networking using unidirectional Satellite links with modem back channel. Built Linux gateway software and hardware solution to use Satellite DVB receiver for network traffic. Set up Satellite network over Australia to six Austrade sites.
- Designed and proved high quality (mpeg 4) video streaming server over Satellite solution using Linux incorporating the Newton e.envoy system.
- Designed, implemented, proved conferencing portal to go with streaming video system and e.envoy based on web technologies including Java, PHP, and Postgresql on Apache. This portal allows many people to post questions to a presenter via a moderator/director who could prioritize the messages sent to the presenter who could be in a different physical location. The portal also allows the presenter to upload slides for presentation and control showing of slides over multiple (100s) sites.

Platypus Systems

Start Date: January 1989
End Date: July 1995
Position/Title: CEO - Managing Director
Responsibilities/ Achievements: (Brief) Founded the company with Mr. G. Dodds and Mr. P. Sessions. Designed, Patented and manufactured a Node based Irrigation Control System The Platypus System. Manufactured 4000 Nodes miniature single valve microcomputer based controllers running on a proprietary lightning tolerant communication system. Major programming in C/C++ on Amiga[tm] 2000-4000 and IBM[tm] compatible computers. SGS Thompson ST6 and Motorola 68HC705 microcontroller design and assembler programming in auxiliary systems. UUCP based automated reporting from the systems to head quarters. Got the contract for the supply of the Irrigation Control System for Homebush Bay Sydney Olympic Site, The Royal Botanic Gardens Sydney, The Royal Botanic Gardens Mount Annan, and golf courses around Australia.

Joint House Department (www.aph.gov.au)

Start Date: July 1989
End Date: June 1990
Position/Title: Electronics & Software Consultant Engineer
Responsibilities/ Achievements: Electronics & Software Consultant Engineer for the Building Management System.

Torrens Industries

Start Date: June 1986
End Date: July 1989
Position/Title: Engineering Manager/Engineer
Responsibilities/ Achievements: (Brief)

- Designed and built Voucher parking meter using magnetic stripe card reader, coin reader and control mechanism. Design included **graphic** LCD display driven via 6809 micro processor control system that I designed and programmed.
- Project managed the completion of the Building Management system for the New Parliament House, and followed it through to hand over. Successfully debugged ADFAs Building management system and helped negotiate final hand over for that system. Worked on the initial design and presentation of new fire automatic call out system.