

Mark Addinall

Software/Systems Engineer

Introduction

- I am a very experienced software engineer currently located in Brisbane Australia. I am looking for suitable contracts involving Web/Application development using PHP, Javascript, jQuery, CSS3, HTML5, MySQL, PostgreSQL, ORACLE PL/SQL, R, Perl and Python. I have an on-going interest in the life sciences, Health, Bioinformatics and Education. I have had experience over a broad range of industries including Federal government, State government, Hospitals, Software development shops, Boutique Advertising agencies, Mining, Transport (Rail), Education (tertiary) and Defence. Most of the positions listed in my employment history have been fixed term contracts with specific end goals. Very interested in using Angular and/or WebGL in a commercial environment. Extremely interested in using my new found skills in R and data science techniques.

Online Profile

<https://www.linkedin.com/in/addinall>

<http://www.addinall.com.au/>

<http://www.addinall.org/>

<https://github.com/addinall?tab=repositories>

Technology Skills

Specialized Technologies	HTML5, JavaScript / JQUERY, CSS3, RESPONSIVE web design, eCommerce APIs, Linux/UNIX System Administration, LAMP stack Administration, BASH, ksh, csh, CMS (including WordPress).	15 - 30 years.
Languages	PHP, Javascript, Perl, ORACLE PL/SQL, SQL. R, Python, C, C++, Pascal, Modula-2, COBOL, Ada, BASIC, Assembly, XML, JSON	5 - 30 years
Methodologies & Frameworks	SCRUM/Agile, Rational Rose, SSADM, LBMS, Angular.js, Backbone.js, HL7	3 - 30 years
Tooling (Design & Development)	GIMP, R-Studio, NetBeans, Git (GitHub), vim	3 - 16 years
Database	MySQL, PostgreSQL, ORACLE, DB2, Hadoop, Mongo, IMS, CISAM	1 - 30 years

Tertiary Education

- Master of Science (IT). Sheffield Polytechnic. UK. 1988-1991
(Course work degree, part time, sponsored by CADAR and British Steel)

Certifications

- ***Epidemics – The Dynamics of Infectious Disease***
November 9th 2015
The Pennsylvania State University
Grade achieved: 96.3%
- ***Epidemics***
November 11th 2015
Hong Kong University HKU01x
Your final grade: 92%
- ***Introduction to C++***
Oct 5th 2015
Microsoft DEV210x
Your final grade: 100%
- ***Introduction to R***
Sep 1st 2015
Microsoft DAT204x
Your final grade: 100%
- ***Preparation for Introductory Biology***
Sep 26th 2014
The University of California. Irvine.
You earned 98.3%
- ***Epidemiology: The Basic Science of Public Health***
Feb 17th 2014
The University of North Carolina at Chapel Hill
You earned 98.3%
with distinction
- ***An Introduction to Population Health***
Apr 14th 2014
University of Manchester
You earned 100%
with distinction
- ***Introduction to Forensic Science***
May 19th 2014
Nanyang Technological University, Singapore

You earned 87.1%
with distinction

- ***Bioinformatics: Life Sciences on Your Computer***
Jun 9th 2014
Johns Hopkins University
You earned 96.5%
with distinction
- ***Virology I: How Viruses Work***
Aug 1st 2013
Columbia University
You earned 92.9%
with distinction
- ***Virology II: How Viruses Cause Disease***
Jan 9th 2014
Columbia University
You earned 91.9%
with distinction
- ***Genes and the Human Condition (From Behavior to Biotechnology)***
Nov 4th 2013
University of Maryland, College Park
You earned 100%
with distinction
- ***The Data Scientist's Toolbox***
Aug 4th 2014
Johns Hopkins University
You earned 100%
with distinction
- ***R Programming***
Aug 7th 2014
Johns Hopkins University
You earned 98%
with distinction
- ***Internet History, Technology, and Security***
Jul 23rd 2012
University of Michigan
You earned 100%
with distinction
- ***MEDORD.*** School of Army Health. Australian Regular Army. 1976.
- ***MEDASST.*** 1 MILITARY HOSPITAL. Australian Regular Army. 1977.

Current Study

- ***Using Python to Access Web Data***
November 2015
The University of Michigan
- ***HTML5 Advanced Techniques for Designing HTML5 Apps***
December 2015
W3Cx - HTML5.2x
- ***Introduction to MongoDB using the MEAN Stack***
December 2015
MongoDBx - M101x
- ***Python for Genomic Data Science***
December 2015
Johns Hopkins University

Recent Career History

FROM
Nov 2010

TO
Present

Private Contractor (Self-employed) **That's IT - QLD (Brisbane, Australia)**

- Have just finished a role that kept me with the one client for five months. CSS and PHP. My first task was purely front end CSS/HTML work, then the company switched my role to back end PHP on a Drupal 6 system. CRM. Client Aspedia.

My role as a contractor includes:

- Bringing technical knowledge and skills to projects ranging in size from my client (a business owner) and myself, to joining and becoming part of larger development teams 10-30 members.
- Provide expertise in the design of applications/Web pages including UX/UI, APIs, external connectivity.
- Provide expertise in programming using a mixture of technologies; PHP, HTML5, CSS3, Javascript, jQuery, Angular, SQL, PL/SQL, Perl et al.
- Provide expertise in Database design and optimisation, MySQL, PostgreSQL, ORACLE.
- Provide expertise in Business Analysis, understanding the client's business requirements. Translating the requirements into a development project plan.
- Provide expertise as a UNIX/Linux Systems Administrator including the administration of the LAMP stack, backup/recovery procedures, patch management, license management.
- Provide on-going support to the end users of my systems.
- On larger projects, participate in SCRUM/Agile methodology, mentor junior staff, suggest innovative and elegant solutions to technical requirements.
- Research emerging technologies so that I can give my customer timely and cost effective advice in the choice of development tools/platforms.
- Ensure the security of networks, machines, applications and databases to industry best practice.

FROM
Feb 2010

TO
Nov
2010

UNIX Systems Admin/Developer

CITEC (Brisbane, Australia)

- In this role 50% of my time was allocated to UNIX (Solaris) Systems administration in a support group of twenty engineers and 50% dedicated to developing in-house intranet tools.
- Provide Level 2 and Level 3 support to users of State government computer systems running on Solaris UNIX or Red Hat Enterprise Linux.
- UNIX/Linux patch administration, backup/restore procedures.
- Writing administration scripts in Perl, Python, BASH and ksh.
- Using PHP, CSS, Javascript and SQL to design and develop in-house intranet based management tools. These tools covered the automation of backup procedures and the provisioning of software/machines/licenses/rack space etc.
- Contributing to several project development/quality groups both as an administrator and as a developer.

FROM
Jan 2008

TO
Nov
2009

Senior Software Engineer

KOOLIVOO (Cairns, Australia)

- KOOLIVOO is a Boutique Advertising/Marketing agency that specialises in the high-end travel and tourist space.
 - The team was small, with myself being the only technical resource. I worked alongside a graphic artist developing custom software for a limited number of clients.
 - Programming using PHP, CSS, HTML, Javascript, jQuery and SQL.
 - System administration of Linux, Windows and MacOS internal machines.
 - Some system administration of external Windows machines.
 - During the course of this work, I developed a CMS (Content Management System) to specifically address the requirements of our customers. The CMS was named 'Chameleon' due to the visual flexibility it offered.
 - Explaining to non-technical staff the pros and cons of various technologies and why we use them.
 - Direct support and requirements analysis roles with the end customer.
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Earlier Career History

Nov 07 - Dec 05

Senior Software Engineer - OPTUS

- A short term contract implementing accounting modifications in the OPTUS Internet (ISP) division.
- Red Hat Linux, Perl, postgresSQL.

May 07 - Nov 07

System Architect - NELLER

- Neller is the company that runs a payroll system for all of Woolworths in Australia.
- My role was to implement and prototype PHP/CSS/Javascript to provide a modern front end that would integrate with the existing payroll software.
- IBM mid-range AS400, Zend PHP, COBOL, RPG, OS400, DB2,CLIST.

Feb 2007 - May 2007

Senior Software Engineer - SA Lotteries

- My contract role was to develop MISWAG (Management Information System WAGERING) to support SA Lottery products in general, and the new addition of LOTTO into the product mix. I was the sole programmer on this project under a very tight schedule.
- MISWAG was developed in Perl using a MS-SQL database.

June 2006 - Dec 2006

Senior Software Engineer/Architect - ENERGEX

- My contract role was to be a part of a SCADA development team consisting of a dozen senior engineers.
- Primarily my task was to write internal and external facing web applications that would report on power distribution and availability.
- Web applications were developed using CGI technologies implemented in C and Perl.

Feb 2006 - May 2006

Senior Software Engineer - iiNet

- Working in a small seven member software engineering team writing in-house tools for the monitoring and provisioning of iiNet resources. Machine and network.

- Perl, Debian Linux.

Jul 2005 - Feb
2006

Senior Software Engineer - Australian Bureau of Statistics

- Part of a small team of ten engineers, however, mostly working on my own.
- I was tasked to re-write the Demographic collection, collation and analysis software in preparation for the 2006 census. I also did some HL7 ERP for the Bureau.
- ORACLE PL/SQL, Solaris, Perl, Java.

Apr 2005 - Jul
2005

Senior Software Engineer - Deakin University

- This contract had me audit all of the PHP of the outward facing web pages for accessibility and W3C compliance, making software fixes as I progressed.
- PHP, ORACLE, CSS, HTML, Dreamweaver, FLASH.

Jan 2005 - Mar
2005

Infrastructure Architect - Department of Public Works

- Consolidate existing data centres, design and cost a new data center build and present recommendations to the department giving three fully costed alternative strategies.

Sep 2004 - Jan
2005

Infrastructure Architect - Queensland University of Technology

- A data room and server consolidation project for the university.
- Develop a five year infrastructure plan covering data rooms, servers, operating systems and storage strategies.

Apr 2004 - Sep
2004

Network Specialist - TELSTRA Managed Networks

- In a team of three, working mostly on my own, my contract task was to develop the Quicktools suite of software that would monitor and report on some 20,000 network routing and switching devices owned by Telstra.
- The software was developed using PHP, HTML, CSS, Perl and ORACLE.

Nov 2001 -
Mar 2004

Private Contractor (Self Employed) - That's IT WA.

- Similar duties to my role now. Developing custom software for clients using a mix of technologies. CGI Web programming in Perl. HTML. C/C++.

Jul 2001 - Nov
2001

Manager, Infrastructure and Network Operations - Department of Minerals and Petroleum WA

- Contract to run this department whilst the regular manager

took long service leave.

- Managing 40+ staff and a multi million dollar development budget at a senior public service grade.

Aug 1999 – Jul 2001 **Technical Manager - That's IT NT**

- Started That's IT in partnership with one other colleague.
- We consulted on many projects in the NT. The largest and most interesting was the design and build of a satellite based WAN that connected several remote aboriginal communities around Arnhem Land. This project had me living and working in the communities for about six months. FIFO to Wadeye, Burunga, Maningrida, Millingimbi, Ramingining, Galiwinku and Gapuwiyak.
- UNIX, Stallion network gear, PAN-AM SAT 2, INMARSAT.

Jun 1999 – Aug 1999 **UNIX System Administrator - DCIS**

- Short term contract addressing some of the backlog of UNIX support and project tasks. Solaris, SCO UNIX, HP-UX, AIX.

Jan 1999 – Jun 1999 **UNIX System Administrator - Port of Fremantle**

- Short term contract looking after the UNIX network whilst the regular sysadmin too long service leave. Solaris.

Jun 1998 – Jan 1999 **Technical Manager - Paradox Digital**

- Paradox digital supplied bandwidth to ISPs at the start of the expansion of the internet in Australia. I led a small team of five network/UNIX engineers.
- Satellite communications, POP builds, bandwidth supply and monitoring, mentoring staff.

Jun 1996 – Apr 1998 **UNIX System Administrator - Mildura Base Hospital**

- Level 1, 2 and 3 support. AT&T V.4 UNIX administration. Red Hat Linux administration.
- Build a Hospital accounting system from the Victorian government WEIS specification. This was done in Perl. I worked with one other engineer.

Apr 1994 – Mar 1996 **Systems Architect - Queensland Rail**

- My initial contract was to design an enterprise email system that would allow ALL of the systems installed to use the same messaging infrastructure. Platforms included Windows, OS/2, VMS, DEC UNIX and IBM 3270 'dumb' terminals connected to 3174 cluster controllers to the IBM PC Mainframe. Duties included chairing large steering and

quality groups, 30+ members and presenting to dozens of different departments. The mail system supported 5,000 concurrent users.

- After my design was successful and being implemented, I was asked to look at designing CAMEL (Coal and Minerals Electronic Link). A system shared between BHP, QRAIL and the Coal Ports in QLD. The system was to render train positions in real time. I implemented this in CGI Perl on a Web Intranet. As far as I know that was the first “Web App” to be deployed in any government department.

Apr 1992 – Apr 1994 **Senior Engineer – AWA Defence Industries**

- I held the position of Technical lead and Senior Software Engineer on project PARAKEET. PARAKEET is the Australian Defence Force Tactical Communications Network. My duties included C programming, mentoring a dozen other staff members, designing RDMS software and APIs, OS selection and testing, preparation and presentation of project milestones to members of the ADF and the Australian Projects Office. SCO UNIX, C, Satellite communications, STALLION X.25 networks.

Jan 1991 – Mar 1992 **Software Engineering Manager – STALLION Technologies**

- STALLION was a world famous Brisbane based company that designed and manufactured network devices. They played a significant role in the uptake of the Internet by allowing ISPs to build using COS PC servers. I led a team of 25+ network/UNIX/Software engineers. Mentoring, installed TQMS, reporting to the board etc. We won the “Australian Exporter of the Year” prize in 1992 for technology export.

Feb 1989 – Jan 1991 **Senior Software Engineer – British Steel (Technical)**

- Primarily running an R&D project involving SAA (Systems Application Architecture) utilising IBM Mainframe MVS-XA and OS/2 PS/2 Workstations on an LU6.2 PU2.1 LAN. I published and presented a seminal paper at IBM, “Co-Operative Processing in a Distributed Network Environment”. This became part of DSOM. COBOL, JCL, JES, TSO, C/C++.

Jan 1988 – Jan 1989 **Senior Software Engineer – CADAR**

- Designing and implementing Statistical Process Control systems for Rolls-Royce, Jaguar, Ford Motor Co, Du Pont et al. C, Windows, Optical fibre networks, wireless data collection.

Feb 1986 – **Senior Software Engineer – Advanced Computer Systems**

- Dec 1987 . In a team of four, writing two major systems, IBMS (Insurance Brokers Management System) and REMS (Real Estate Management System). These were written using UCSD - P-system on Motorola 68000 minicomputers using the Pascal language.
- Feb 1984 - Feb 1986 **Junior Programmer - > Senior Programmer - Sybiz Software**
- My first position in IT. I joined the company as part of a small four person team to write the Sybiz accounting system on the newly released MS-DOS operating system. This was done using assembler and Microsoft Business BASIC. I took over the Apple development team after a year and led two engineers re-writing Sybiz on the newly released Apple Macintosh/Lisa. Pascal.
- 1981 - 1984 • Mining Mt. Isa, farming Mildura, Berrie.
- 1976 - 1981 • Soldier. (MEDIC) Australian Regular Army.
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References / Testimonials

My personal and professional references from industry peers can also be found on my *LinkedIn* profile (<https://www.linkedin.com/in/addinall>). I can provide local character references upon request.

“Mark is amazing, he built natural.addinall.net for me in a few hours. Brilliant at anything IT related. You can either use someone good or choose Mark he's just Genius. His work ethic is unbelievable. There is high standards. Then there is Mark's standard. Thank you for not just helping me manage my business but helping it grow.”

Belinda Jansen

Managing Director at Inside Out Body Sense

“Over the past 3 months I have been working with Mark to put together my custom website at www.crosscitydjs.com.au. Over this time i have found him to be highly knowledgeable in his skill set as well as easy to work with.

Throughout the creative process and structuring of the website it was very easy for me to convey my ideas to him so that i got exactly what I wanted.

Marks knowledge and experience made this project achievable and successful. I give this man a high recommendation”

Lawrence Ridolfi

Small business owner and musician at Cross City DJs Brisbane

“Mark is an experienced professional with whom I worked with in 2011. He was extremely methodical and worked under arduous conditions to achieve an outcome in a very short time frame. During the time I worked with him, Mark demonstrated tenacity, dedication and a great deal of good will to assist with the project. I would happily recommend Mark Addinall for future work.”

Cate Banks

DIRECTOR at Australian Centre for Integrative Law (ACIL)

“Mark was only with CITEC for a short time due to circumstances beyond our control, however in that time he utilised his wealth of development skills and showed a level of enthusiasm and insight that is rarely seen. I recommend Mark for any role that requires intricate web design and back end integration.”

Mark Wilton

ICT Operations Manager CITEC

Hobbies

When not studying, I play guitar, electric and acoustic, very badly! I like to surf when I can. Reading, 4X4 driving in the bush when time permits.

