

Nicholas Savile Robinson

me@nicholassavilerobinson.com | Palo Alto, CA, 95401 | +1 (213) 342-1985

A Mechatronic Engineer educated in Software Development, Embedded Systems Design and Mechanical Engineering, experienced with Open-Source Web/Application Development, Highly Scalable Cloud-Based Systems, Linux Server Administration, Helicopter Piloting and Autonomous/Remote-Controlled Vehicles.

Professional Experience

Grab Games - Social/Mobile Gaming, Los Angeles, CA, USA

Senior Systems Engineer / Lead System Administrator / Game Developer

2010 - Present

- Engineering massively scalable public-facing cloud-based systems catering to 3M+ MAU
- Administering:
 - 50+ Amazon EC2 / Xen Cloud Platform private/public server clusters using Puppet
 - 30+ node sharded and replicated MongoDB clusters
 - Multi-node Nagios monitoring system and Cacti systems charting installation
 - Auto-scaling Node.js/Nginx/PHP-FPM stack tightly coupled with Jenkins CI
- Designing/Implementing:
 - Core PHP/Javascript/AS3 frameworks
 - RESTful game service APIs/SDKs for internal and public consumption
 - Social Network agnostic OAuth2 Server/API/SDKs
 - Node.js load balancers
 - Internal development tools
- Integrating Third-party/Social Network APIs
- Managing subordinates
- Mentoring junior engineers
- Supervising:
 - Project deployment
 - Research, development and expansion

CloudTronix - Web Application Development, Sydney, NSW, Australia

Freelance Web Application Developer

2003 - Present

- Developing custom PHP/MySQL Websites for assorted clients
- Technology consultation
- Search Engine Optimization

Cyber Technologies - Advanced UAV Solutions, Perth, WA, Australia

UAV Simulation Developer

Winter 2010

- Developing training package simulation software for the CyberQuad platform
- Training clients in simulator/platform usage

Cyber-Rain - Intelligent Irrigation Systems, Los Angeles, CA, USA

Embedded Application Development

Fall 2009

- Modification of existing ARM Cortex-M3 embedded software
- Creation of an embedded web control interface
- Creation of cross-platform desktop device locator application

Qualifications

Bachelor of Mechatronic Engineering, University of New South Wales, Sydney, NSW, Australia

2010

- Dean's Honors, First Class
- Sun Microsystems Australia, Prize in Java Programming

Commercial Pilot License (Helicopters), Heliwest, Western Australia

2005

Basic Aeronautical Knowledge, Western Australian Aviation College, Western Australia

2005

Technical Expertise

Operating Systems:	DOS, Windows, Linux (Debian, Ubuntu, CentOS, Fedora), Mac OS
Virtualization:	Amazon EC2, Xen Cloud Platform, Parallels, VMWare, Microsoft VirtualPC
Architectures:	AVR, ARM Cortex-M3/A8, PIC
Databases:	MongoDB, MySQL, PostgreSQL, Microsoft Access, Microsoft SQL Server, SQLite
Languages:	C/C++/C#/Cocoa, Java, Ruby, VB, MIPS, Haskell HTML, CSS, JavaScript, Node.js, PHP, ASP/ASP.NET, ActionScript 3.0, Python, Perl, VBScript, MATLAB, LabView
Frameworks:	Ruby on Rails, CakePHP, Qt
Design Suites:	Adobe Flash, SolidWorks, CATIA, Pro/ENGINEER, RobotStudio, EaglePCB
CMS:	Drupal, Joomla, WordPress, osCommerce

Web Portfolio

- Stay in This, Fashion Opinion Crowdsourcing - Founding CTO / Webmaster
Website - <http://www.stayinthis.com>
- Cygnus, Wholesale Satellite Services - Webmaster
Website - <http://www.cygnus.net.au>
- QLD Coal Corporation, Natural Resources Company - Webmaster
Website - <http://www.qldcoal.com>
- Theta Chi Fraternity, UCLA Beta Alpha Chapter - Webmaster
Website - <http://www.bruinthetachi.org>

Open Source Involvement

- BoxeeBox Remote Control PHP SDK using JSONRPC
 - <https://github.com/nicholasrobinson/BoxeeBox-PHP-JSONRPC>
- BoxeeBox Remote Control PHP SDK using Boxee/XBMC Remote Control Interface (HTTP API)
 - <https://github.com/nicholasrobinson/BoxeeBox-PHP-RemoteControlInterface>
- Regular contributions to Buffalo Linkstation/KuroBox Debian Distribution
 - http://buffalo.nas-central.org/wiki/Install_Debian_Lenny_on_Stock_Kurobox
- Creator of XSens MTi-G module for Open Robot Control System
 - http://www.ros.org/browse/details.php?name=xsens_mti

Unmanned Aerial Vehicle Experience

Cyber Technologies CyberQuad - Training Simulation Developer **2010**
<http://www.cybertechuav.com.au>

- Developed training package simulation software

University of New South Wales MAVSTAR - Pilot / Engineer **2009 - 2010**
<http://www.robotics.unsw.edu.au/mavstar/>

- Competed at the 4th US - European MAV Flight Competition in Pensacola, Florida
- Achieved 3rd place in the indoor competition
- Achieved 1st place in the report and presentation competition

Entecho Mupod - Test Pilot **2007**
<http://www.entecho.com.au>

- Conducted preliminary flight tests with the Mupod prototype