

ROBERT L. NELSON, JR.

7135 134th Ct SE, #C2
Newcastle, WA 98059 nexisentertainment@gmail.com Cell: (360) 320-4255

Education

Chapman University – Bachelor’s in Computing Technology (2012, Latin Honors)

Skagit Valley College – Associate in Arts University and College Transfer (2008; High Honors)

Skagit Valley College – Associate in Technical Arts in Computer Information Systems (2008; High Honors)

Experience

Game & Server Developer - Kerbal Space Program, Squad, Mexico City, Mexico
<https://kerbalspaceprogram.com/> - (December 2011 – 2013)

- Developed custom multiplatform patching system, using Python, pyinstaller, and a custom rsync patch in C for MySQL integration.
- Developed plugin architecture through reverse-engineered game code, using custom tools, MSIL, C#, and ILSpy.
- Installed, optimized, and maintained critical computing systems, was on 24/7 call.
- Modified and secured pre-existing software packages against attacks.
- Trained and directed co-workers in systems operation and maintenance.
- Made use of skills in PHP, C#, Python, and CIL, also worked with Jenkins CI, Steamworks, Unity3d, GIMP, MySQL, and Inkscape on Windows, Linux, and Mac OSX.

Developer – From the Depths, Brilliant Skies, Ltd. - <http://fromthedepthsgame.com/> (2015 - 2016)

- Made an automated binary patching system (prior to employment) that injected custom code into the game.
- Developed entirely new plugin architecture with dependency resolution using C#, Unity 3D, MSIL, and custom tools.
- Created a complex system to inject players’ art assets into the game at runtime using C# and Unity3D.
- Added new Lua interfaces using knowledge of Lua and C#.
- Used skills in Python, C#, MSIL, Lua, and Inkscape.

Developer – Space Station 13 (/vg/station fork) - <https://github.com/vgstation-coders/vgstation13> (2012 - Present)

- Refactored old and often complex game subsystems, added new features, fixed bugs using the BYOND programming language.
- Integrated with external databases and websites using PHP, MySQL, and Python, including use of Phinx for database migrations, composer, yarn, npm, and others.
- Developed completely new custom tools for rendering reference maps and code analysis, using Python and C#.
- Developed BYOND code parser using Python
- Operated Jenkins CI server for nightly builds and automated testing.
- Routinely worked with BYOND.com developers and other forks to improve engine and share changes.
- Created custom Python server monitoring and maintenance system for rolling out automated updates.
- Developed custom binary-level Snort rules to mitigate 0-day DoS attacks

Laboratory Assistant – Student Services, Skagit Valley College, Whidbey Island, WA (September 2005 – 2008)

- Checked students into lab
- Gathered statistics (via Excel spreadsheets)
- Maintained office equipment, including color and black/white laser printers, scanners, and tools for disabled students (Dragon Speech)
- Provided assistance to students with computer hardware and software-related issues

Website Developer – Freelance, Oak Harbor, WA (October 2003 - 2011)

- Built and maintained dynamic W3C-compliant web presences using HTML5 and PHP
- Worked with shared, dedicated, and cloud services (Linode, Amazon AWS)
- Created custom graphics for each site with Inkscape, GIMP, and Photoshop

Computer Skills

Operating Systems

- Gentoo Linux
- Debian Linux
- Red Hat Linux
- Windows 95 – 10
- Windows Server NT, 2000, 2003, 2008
- DOS 6.2
- pfSense NetBSD Firewall
- iOS 5+
- Mac OSX

Applications

- Microsoft Office
- GIMP
- Inkscape
- FlashDevelop
- Adobe Suite CS6 (Photoshop, Premiere, Flash)
- Apache Webserver
- Lighttpd 1.4+
- MySQL 4.0+
- PostgreSQL
- VMWare
- Jenkins CI
- Tomcat 6+
- Nexus Maven Repository
- BuildBot CI
- Maven
- CMake
- MediaWiki
- Unity3D 4.x (have 5 license)
- HHVM
- Zoneminder
- Atom Text Editor
- Git + LFS
- GitLab

Hardware

- Computer/Server Chassis
 - AT family (AT, ATX)
 - 1-2U rackmounts
- Networking Hardware
 - CAT5e cabling and connectors
 - Enterprise-grade switches, hubs and routers (excluding CISCO & Juniper)
 - DAMAC and HP networking racks
 - 4-post & 2-post enclosures
- 3D Printers
 - Prusa i3 Mk3(s)
 - Monoprice Maker Select Plus

Programming Languages

- ActionScript
- ANSI C/C++
- C# (and CIL)
- Visual Basic
- PHP 4+
- Lua 5+
- Java 5+
- JavaScript (incl. ESNext)
- Python
- Bash
- MSDOS Batch
- GMake
- Coffeescript
- Ply Lexer/Parser Syntax
- Node.js
- (Practically anything, really.)