

# Spencer Nusbaum

## Software Developer

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**Spencer Nusbaum**

**Online Software Development Portfolio (With Visuals):**  
<https://www.MiniDevOps.com>

**Email:**  
[CppObjectOrientedProgrammer@gmail.com](mailto:CppObjectOrientedProgrammer@gmail.com)

**YouTube Channel (C++ Emphasis, Generally Game Hacking):**  
<https://www.youtube.com/c/CppObjectOrientedProgrammer>

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## Skills

### Languages:

- C++
- PHP
- HTML
- CSS
- JavaScript
- jQuery
- C
- Python
- Java
- C#
- x86 assembly (basics)

### Tools/Software:

- Git
- Atlassian Jira
- Atlassian Bitbucket
- Atlassian Confluence
- Jenkins CI/CD
- Qt Framework for C++
- Wordpress
- WooCommerce
- Shopify
- Bootstrap
- MySQL
- phpMyAdmin
- Ubuntu / Mac / Windows based OSes
- Inno Setup
- Visual Studio Code
- Microsoft Visual Studio
- Android Studio
- Qt Creator
- Terminal & Command Prompt
- Emacs
- Vi
- Yocto Project

### Other Relevant Experience:

- Ethical hacking and security knowledge for proactive secure software development - ensuring data confidentiality, integrity, and availability. I have experience ranging from configuring managed network switches, firewalls, server hardening, and even making ethical C++ based solo-player game hacking tutorials - showing assembly and memory level hacking.
- Very strong observation, critical thinking, and determination skills, as well as a meticulously cultivated, logical and realistic understanding of the world.
- Limited but practical electrical engineering experience - generally for monitoring sensors, but often also for 120v relay style automation. Most recently I automated an old Maytag washing machine, by replacing the original timer motor 'computer' it used with a raspberry pi, relays, and some simple software I put together. It was a fun project, and grew my TikTok account a lot actually - one video on it getting over 271,000 views.

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## Experience

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### Something Clever Creative Production / Lead Software Developer

OCTOBER 2016 - PRESENT, BEAVERTON OREGON

- Designed and developed software solutions that manage and apply photo and video effects for photo/video booths areas and kiosks at Comic-Con, PAX and other events
- Made online-only photo personalization websites for various brands, that allow fans to create custom downloadable collectables
- Developed solutions that were customized for large brands including Chevrolet, Xbox Game Pass, DEKALB, ASGROW
- Utilized a variety of APIs, including: event specific attendee information APIs from scanning customer badges (both Qr code and RFID style), PHPMailer and Sendgrid API for email, twilio API for MMS, Facebook/Instagram/Twitter API for social media sharing
- Worked and integrated with many softwares/libraries/frameworks including: Adobe After Effects, FFmpeg, Qt framework for C++, QZXing (barcode processing library), PHPMailer, bootstrap

### Graphic Products / Software Developer I

AUGUST 2018 - JULY 2021, BEAVERTON OREGON

- Worked to update and bug-fix software for industrial safety label printers
- Created an updater/installer software for wireless updates of the industrial safety label printers (instead of via a USB/SD card), as well as updated our DevOps flow to allow easy deployment of update files to the staging and release servers, as well as allow easy reverting to older released update if needed.
- Helped configure the cross-compiler toolchains as well configure our custom linux distributions - using the Yocto project
- Significantly improved the team's DevOps flow by making software to coordinate when a git repository push was received by the Atlassian Bitbucket server, to then generate and create a custom Jenkins pipeline that would only build relevant projects and OSes of the monorepo, based off what was modified or specially requested in a configuration file by the developer. Prior to this, a Jenkins build would build the entire code base we had, easily taking 20-30 minutes per developer to build. My software allowed us to cut the build to just under a few minutes, sometimes under a minute - with it outputting exactly what each developer needed to ensure the code built and could begin testing it.

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## Awards

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### 2013 - 1st Place at Washington State University's Imagine Tomorrow Competition

- Received 1st place and \$10,000 in the Technology category at the Washington State University's Imagine Tomorrow competition in 2013 for leading a team to design and develop a wireless Intelligent Home Energy Management System (IHEMS) - which included making a device management, tracking and scheduling website, along with developing electronics for the outlet power control and power monitoring. In addition to outlet management, it monitored switches and RFID tags (for triggering certain devices upon entering the home).
- We calculated that with a typical 9-5 work schedule that we could reduce average home power consumption by an estimated 40% - simply by disconnecting power on phantom devices and devices that are not in use

while away from the home.

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## Education

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**Washington State University - Bachelor's Degree**

JANUARY 2014 - MAY 2018