Spencer Nusbaum

Software Developer

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Software Development Portfolio:
  https://www.SpencerNusbaum.com

Email Address:
  CppObjectOrientedProgrammer@gmail.com

YouTube Channel (C++ and Hacking Emphasis):
  https://www.youtube.com/c/CppObjectOrientedProgrammer

Skills

Languages:

- C++
- PHP
- Python
- HTML
- CSS
- JavaScript
- C
- Java
- C#
- Bash Scripting
- jQuery
- x86 assembly (limited)

Tools/Software:

- Git
- Agile / Scrum
- Docker
- Kubernetes
- Atlassian Suite (Jira, Bitbucket, Confluence)
- Jenkins
- Qt Framework for C++
- Ubuntu / Mac / Windows OSes
- Cloud Computing - AWS, DigitalOcean
- VirtualBox, VMWare
- Wordpress
- Inno Setup
- Visual Studio Code
- Microsoft Visual Studio
- Android Studio
- Qt Creator
- Emacs, Vi, Nano
- Yocto Project
- Bootstrap
- MySQL
- phpMyAdmin
- WooCommerce
- Shopify

Other Relevant Experience:

- Well-versed in ethical hacking and security for proactive, secure software development - helping to ensure data confidentiality, integrity, and availability across both desktop and web style applications.
- Very strong observation, critical thinking, logic, and determination skills.
- Practical electrical engineering experience - typically monitoring sensors/switches, relay style automation, and stepper and DC motor control.
- Experience with 120v electrical projects. I automated a broken Maytag washing machine I got for free, by replacing the original broken timer motor it used, with a raspberry pi, relays, and some software I put together. It was a fun project, and was popular on TikTok for a while - one video getting over 272K views.

Experience

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 booths and kiosks at places like Comic-Con, PAX or other event gatherings
- 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 and 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 with and integrated many softwares/libraries/frameworks including Adobe After Effects, FFmpeg, Qt framework for C++, QZXing (barcode processing library), PHPMailer, bootstrap, any RESTful APIs, and much more.

Graphic Products / Software Developer I
AUGUST 2018 - JULY 2021, BEAVERTON OREGON

- Updated and bug-fixed software for industrial safety label printers
- Created an updater/installer software for wireless updates of industrial safety label printers, instead of USB/SD card updates
- Configured cross-compiler toolchains, and custom embedded linux distributions using the Yocto project
- Significantly improved DevOps flow by automating the creation and maintenance of Jenkins pipelines, per Git branch for our monorepo. I designed the system to cut down build time by caching and only building relevant projects to code that was specifically modified on the branch pushed. Prior to this, a Jenkins pipeline and build would be maintained per developer (which is more error prone, and time consuming), and our monorepo build time was easily 20+ minutes. I cut it down to just a few minutes - sometimes under a minute, without any additional developer workflow steps - just the standard `git push` to trigger.

Awards

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, and switch and RFID tag monitoring (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.

Education

Washington State University - Bachelor's Degree
JANUARY 2014 - MAY 2018