Nicholas Bly

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Summary

Software Engineer with extensive experience in software development and a strong background in information systems management. Skilled in Python and C#, with a proven track record of developing secure applications and optimizing system performance. Notable achievements include deploying 6-year, 48000+ lines of executable code Xbox application, implementing a secure authentication system supporting 300+ users, and discovering a security vulnerability in Xbox memory. Eager to leverage expertise in Python to drive innovative solutions and enhance software security.

Education

Keller Graduate School of Management   2019 - 2020
Master of Information Systems Management, Information Systems Management
- **GPA:** 3.76
- **Achievements:** Concentration in Information Systems Security

DeVry University   2016 - 2019
Bachelor of Science, Computer Information Systems
- **GPA:** 3.70
- **Achievements:** Concentration in Web Game Programming

Technical Skills

- **Programming Languages**: C#, Python
- **Web Technologies**: HTML, CSS, JavaScript
- **Databases**: MySQL, SQL, SQLite
- **Development Tools**: GitHub, .NET (WinForms, Core, MVC), Entity Framework
- **Additional Skills**: Linux (Kali, Bash command line), PowerShell, xUnit Testing
- **Core Competencies**: OOP, Analytical Problem-Solving, Debugging

Projects/GitHub

YouTube WebOS Enhanced | GitHub   May 2025 - Present
- Enhanced YouTube experience for LG WebOS smart TVs by integrating SponsorBlock for automated ad-skipping, redesigning configuration UI, and implementing additional features.   Developed using JavaScript, HTML/CSS, and WebOS SDK with focus on DOM manipulation, event handling, optimizations and responsive UI/UX design supporting LG TVs 2016 and newer.

- Created Chromium extensions utilizing JavaScript, HTML/CSS, and manifest versioning.
  YouTube tweaks - bypass content restrictions, hide static elements for OLED screens, and yt-dlp integration

Smart Air Purifier App | GitHub   October 2025 – Present
Rewrote core functionality of smart air purifier app that was shutdown. Includes reverse-engineering Bluetooth encryption and localkey via hooking functions, bypassing web servers, rebuilding UI in HTML/CSS, and mapping native bridge.

StubBot | https://stubbot.net/   May 2025 – October 2025
- Developed Python automation program utilizing computer vision libraries (PyAutoGUI, PyTesseract, EasyOCR) to autonomously execute video game market transactions, implementing intelligent image and color recognition, smart error handling for excellent uptime, and automated trading logic across 2000+ lines of code. Launched stubbot.net to provide gaming services and setup.

Professional Experience

TechNick Computer Services – NickBly.com   2014 - Present
C#.NET Software Developer, Remote Desktop Support Specialist
- Developed video game app with 48000 lines of executable code, 6 years of research, coding, testing, and networking with other users
- Implemented secure authentication system to support 300+ users including setup and remote desktop support and troubleshooting
- Developed video game apps using C#, C++, and PowerPC with expertise in reverse-engineering and disassembly tools (IDA Pro, HxD)
- Provided C# application security coding lessons, including obfuscation, anti-debugging, and encrypting web requests
- Provided 1500+ account services to gaming users between 2014 and 2021
- Discovered and reported a security vulnerability in Xbox 360 memory (2019)

TechNick Computer Services – NickBly.com   2021 - Present
Computer Technician   *Cranford, NJ*
- Built and serviced computers, including desktops, all-in-ones, and laptops, resulting in improved system stability, reliability, and customer satisfaction
- Replaced laptop keyboards, upgraded RAM, added solid-state drives, and performed general hardware maintenance, leading to enhanced device performance and longevity

- Optimized and enhanced client systems using PowerShell scripts for improved performance and security, resulting in reduced downtime and increased data protection

Certification

- **[Google Cybersecurity Professional Certificate](#)**: Completed December 2023
- **C# Unit Testing with xUnit**
- **C# and .NET Essential Training**: by Joe Marini - LinkedIn Learning
- **C# Practice: Generic Collections**
- **Udemy-C#**