ℛ Rich A. Marino | Software Engineer

Phone: +1-857-288-8884
E-Mail q@rm.vg
Web: https://rm.vg/
New York, NY / Dallas, TX / Fort Lauderdale, FL

Skillset

Passionate, personable software engineer and technologist. Quick learner, problem solver, and thrives in high-stakes environment. Very passionate about making things run as fast and reliably as possible.
Heavy professional user of C, C++, C#. Additional work with Java, PHP, Node.JS, Javascript/HTML, SQL, Redis, Hyper-V, ESX. Specialties in networking, virtualization, and operating systems.

Professional Experience

Acuity Brands Lighting   **(March 2017 -)**
◦ Designed and built a web service to facilitate secure firmware updates across all of Acuity's future products. A secure mechanism of uploading files using Azure Single Sign On to link with corporate domain was also developed. (C# ASP.NET Core MVC, Azure, Active Directory)
◦ Designed and built an API to allow efficient access to commercial lighting controlled by the nLight protocol. (C++, C)
◦ Contributed expertise towards integration of a new wireless nLight product into the existing platform. (C#)
◦ Rebuilt a critical build server, which resolved significant delays and improved development efficiency. (VSTS, MSBuild, InstallShield)

Microsoft   **(May 2015 - Nov 2016)**
Windows Fresh Start   (Dec 2015 - Nov 2016)
◦ Designed and built a Windows feature that can quickly clean a PC of all software while keeping drivers and files.(C, C#, C++)
◦ Implemented various graphic user interface (GUI) components. (C#)
Windows Networking   (May 2015 - Dec 2015)
◦ Led bug fixes across an enormous codebase (Windows) while in charge of maintaining VPN, Enterprise Wi-Fi, and Ethernet features.
◦ Utilized big data analysis expertise to answer business questions. (SQL, internal technology)
◦ Designed test software for Hyper-V Software Defined Networking Quality of Service. (Hyper-V, TCP/UDP, C/C++)
Microsoft Intern Program (May 2014 - August 2014) - Windows Networking
◦ Developed a Cloud Platform System (Azure Stack) orchestration and management client, utilizing REST/JSON.
◦ Contributed to Windows NDIS source code, wrote the first network driver for Windows 10 (C)
Microsoft Intern Program (May 2013 - August 2013) - Windows Networking
◦ Developed a UDP NAT (Network Address Translator) and Router. (C, C#)
Microsoft Intern Program (May 2012 - August 2012) - Windows Networking
◦ Designed and developed an automated test system for Connected Standby low power mode. (C)

Hackathon Projects

WubLink (2014)
◦ Developed backend for an app that allows crowd interaction with a live DJ that authenticates via and audio watermark.
Ultiamte Party Playlist (2014)
◦ Web app that analyzed Facebook friends at an event, then created RDIO playlist based on collective interests.
GoToEvent (2012)
◦ Web App that allowed sending and tracking of event invitations via E-Mail, SMS, and telephone calls via Twilio.

Independent and University Projects

Hidden DNS Services (2017)
◦ Wrote an authoritative DNS server that allowed for both normal lookups and steganographic traffic tunneling and data exfiltration.
◦ Also provides access to the current Drudge Report home page as TXT records.
Performant PHP Web Server (2013-2014)
◦ A full, high-performance web server written in PHP.
◦ Also developed a virtual appliance for securely running a Deep Web Site / Tor Hidden Site.
High Performance University CMS and style sheet (2010-2014)
◦ Built a content management system to facilitate user uploaded and designed web pages by untrusted parties.
Near Field File Sharing (2013-2014)
◦ Developed software to facilitate quick and easy sharing of files between physically near computers via UDP Multicast or Internet.
◦ Conducted extensive research into platform-agnostic zero-config communication.
Small Windows 95 (2008)
◦ Attempted to get a working Windows 95 system that fit on a single floppy disk by selectively removing components.
◦ Created a 3.5MB Windows 95, with a core system in 2.88MB. Also produced a 48MB Windows XP, and a 640KB Windows 3.1.

Other Experience and Awards

UHACK 2014 - 2nd Place Winner: Ultimate Party Playlist
UHACK 2012 - Best Use of Twilio: GoToEvent
Engineering Advisory Board (University of Miami), Director of Technology (Jan 2011 - May 2014)

Education

University of Miami (Miami, FL)
2010 - 2014, Computer Software Engineering/Computer Science
Awards: Dickinson Scholarship.