# markdonohoe

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## **HIGHLIGHTS**

StackOverflow Rating of over 24,365 (Top 1% of the site worldwide)
Rated one of the highest in C#/Swift, Contributions reached 1.5M+ people

# **Full-Stack Architect on Multiple Platforms**

Exceptional front-end skills in iOS and WPF, Very-strong API and MicroServices design skills, Proficient in Android. Comfortable with SQL stored procedures

Highly Skilled at Understanding and Breaking Down Complex Problems
Substantially-above-Average capability to both understand, and effectively
communicate areas of concern and potential future impacts of design
decisions to both development teams, product owners and clients/customers.

## Technical Lead of Development Teams up to 12 People

Successfully led the design and implementation of multi-part, multi-stage development projects with simultaneous release on multiple platforms.

# 30+ years of software development experience

First program Age 12, First award Age 13, First Copyright Age 14

## Instructed Coding and Design Seminars, Classes and Lectures

Gave presentations on topics such as advanced-level programming techniques, consistent and effective user interface design, SOLID and CLEAN API design, services object modeling, and coding and graphics tips and tricks

DEVELOPMENT SKILLS

WPF iOS Android Windows macOS

#### **SOFTWARE**

Xcode 13
Visual Studio 2019, 2022
Visual Studio 2019, 2022 for Mac
Visual Studio Code
Android Studio 3
GIT / Mercurial / Subversion
Power JSON Editor
XMpLify (XML editor)

Adobe Photoshop CC 2021
Adobe Illustrator CC 2021
Xamarin
PaintCode 3
Sketch
Apple Keynote
Postman (Web services client)
Loupedeck Config (Part of private beta)

#### **WORK EXPERIENCE**

July 2020 to Present (Current)

# **Software Engineer - Mobile**

Facebook - New York City, NY

Utilized: Swift, Objective-C, Buck, Diffusion, Python

- Part of the core team bringing Swift language to the Facebook Infrastructure
- Helping provide metrics to show the impact of introducing Swift to the main Facebook mobile application on iOS.
- Implemented core Swift infrastructure to support logging and metrics across all of Facebook's various iOS Widgets (Stories, Notifications, Videos teams)
- Authored several documents to align business, product and engineering around iOS
   Widget infrastructure, capabilities, logging a, DS/DE and metrics

June 2016 to July 2020 (4 Years)

# Digital Software Lead Analyst / Vice President of Engineering

Citi FinTech - Citigroup, Long Island City, NY

Utilized: Swift, Java, iOS, Android

- Multiple Lead roles for several agile teams for the Citibank mobile apps
- Helped implement code review and coding standards across all of engineering
- Improved collaboration between Engineering and Design to improve workflow
- Championed CLEAN and DRY Architecture patterns with a focus on MVVM
- Led refactoring of existing designs to improve performance while simultaneously reducing the overall app size by 10% and reducing code in some features by 90%

March 2009 to April 2016 (7 Years)

# iOS Software Architect / C#/WPF Senior Software Engineer

Crestron Electronics - Rockleigh, NY

Project 1: Crestron Mobile 2.0 (Utilized Objective C/C++, iOS and macOS)

- Took sole ownership of an already-released Crestron Mobile 1.0 application to address existing memory leaks, app crashes and poor performance
- Ground-up rewrite of the networking protocol and rendering stack. This resulted in an overall memory reduction of 300% (11,000% in one area), speed was increased by 2,600% and supported project size was increased by 800%.
- It reached the #1 spot in the home automation/control category in the App Store for both highest-grossing revenues and highest customer satisfaction
- Reached #31 in highest-grossing revenues across all categories in the App Store.
- \* Crestron Mobile 2.0 was selected by Apple to appear in one of their international iPhone commercials as an example of excellent user interface design and functionality

## Project 2: Crestron Design Studio (Utilized WPF/C#)

- Primary responsibilities were to lead the UI design of the overall application
- Successfully speed up the existing UI's implementation by a factor of 400-450%
- Re-designed large portions of the UI to make them more user-friendly
- Worked directly under the chief architect to standardize portions of the code base.
- Authored more than twenty custom controls and their developer-facing APIs

December 2004 to March 2009 (4 Years, 4 months)

#### **Chief Software Architect / Team Leader**

**Porter Valley Software** – Porter Valley Ranch, CA (Remote from NY/NJ area) Utilized C#.NET, VB.NET, SQL Server, SQLite, VistaDB, Exchange Server

- Led a team of five in designing a multi-platform data-aggregation and reporting platform for both Windows and Mobile
- Released three separate titles based on that platform: InspectVue Residential, InspectVue Commercial and InspectVue Fire
- Clients of InspectVue include
  US Military for inspecting the USS Ronald Reagan and military housing in Iraq
  Allied Schools, an insurance training academy who chose InspectVue to be used as
  the teaching curriculum for their classrooms
  Environmental Services Professionals, which after using our software for their bankowned housing inspections during the financial crisis, agreed to purchase Porter
  Valley Software for \$5 Million in cash and stock offerings.

May 2007 to March 2009 (1 Year, 10 months)

(Note: Environmental Service Professionals eventually purchased Porter Valley Software, hence the overlap in dates)

## Chief Software Architect / Team Leader

**Environmental Service Professionals** – Washington (Remote from NY/NJ area) Utilized C#.NET, VB.NET, ASP.NET, SQL Server, SQLite, VistaDB, Exchange Server

- Led a team of four in integrating the InspectVue platform (above) within ESP's existing architecture and website
- Converted their existing ASP website to ASP.NET, reducing their code by 80% while reducing planned development time by 50%
- Wrote custom SQL Queries for SOAP-based web services which were integrated into the InspectVue software for a complete end-to-end solution

April 2002 to June 2005 (3 Years, 2 months)

## **Proprietor/Chief Software Architect**

**Pen & Inc Handheld Software** – Succasunna, NJ Utilized Microsoft eMbedded Visual C++, Win32, ASP.NET, SQL Server

- Created the successful startup Pen & Inc. Software which focused on handheld applications in the pre iOS/Android era.
- Code utilized custom C/C++ frameworks rather than MFC or ATL due to size constraints.
- Our flagship software, PenAgenda was selected as one of the presented titles by Handango, Inc. thanks to us earning a Top Seller award in our category.
- Personally designed, coded and hosted the company's website on a dedicated Windows Server, which I also managed.

July 2004 to Dec 2004 (6-month contract)

## **Lead Developer**

Martindale Hubbell - New Providence, NJ Utilized C#.NET, Oracle 9i, Microsoft Word SDK

- Designed a fully-automated document queueing and processing system for the careers portal of Martindale.com
- Documents were stored in a distributed file system with metadata for the documents loaded into the database for querying, location, and retrieval

# ADDITIONAL WORK EXPERIENCE (Summary)

Sept 2003 to Dec 2003

ASP.NET Reporting Intranet Architect / Team Lead

(4-month contract) Johnson & Johnson - North Brunswick, NJ

Utilized C#.NET, SQL Server, Crystal Reports, ASP.NET

January 2003 to September 2003 (9-month contract) **ASP.NET Intranet Architect / Site Designer** 

Roche Vitamins - Parsippany, NJ

Utilized C#.NET, ASP.NET, SQL Server 2000

Apr 2002 to Dec 2002 (9-month contract) Senior Web Framework/Template Designer Lawyers.com - New Providence, NJ

Utilized: Adobe Photoshop, Visual Studio.NET, TextPad, DHTML, JavaScript

July 2001 to Dec 2001 (6-month contract) **ASP.NET Software Engineer** 

WeightWatchers.com - New York, NY

Utilized: Visual Studio.NET, Oracle 8i, Adobe Photoshop 6

Earlier Clients (Alphabetic)

AT&T

**Chubb Insurance** 

**Curtiss-Wright Flight Systems** 

**Econium** 

**Hoechst-Celanese** 

**Merck Pharmaceuticals (3 Separate Contracts)** 

Merck-Medco Managed Care Morgan Stanley Dean Witter

Net2Phone

**New York Music and Internet Expo** 

**Sea-Land Corporation** 

Viacom