markdonohoe



HIGHLIGHTS

StackOverflow Rating of over 30,600 (Top 1% of the site worldwide)
Rated highly in the areas of Swift and C#, Contributions reached 2.6M+ people.

Hyper-Passionate about User Experience for both UI/UX and API Design Championed a core team belief that user experience isn't just what's on screen, but it equally applies to API design. Focus on usability first, and functionality will follow. Features can always be added, but you only get one shot at a good user experience, something which can make or break a product.

Highly Skilled at Understanding and Breaking Down Complex Problems
Exceptional skills to both understand, and effectively communicate areas of focus, direction, current concern and potential future impacts of design to both development teams, product owners, stakeholders 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.

40+ years of software development experience

First program, Age 12; First award, Age 13; First software 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 plus graphics tips and tricks

DEVELOPMENT SKILLS

Swift SwiftUI SwiftUI

SOFTWARE

Xcode 16 Visual Studio 2022 Visual Studio Code CodeRunner 4 JetBrains Rider Arduino Avalonia UI (Xplat)
Microsoft MAUI/Xamarin (Xplat)
Adobe Creative Cloud
PaintCode
Autodesk Fusion

WORK EXPERIENCE

June 2022 to Present (Current)

Software Engineer - Siri AIML / Core OS / Internal Tools

Apple - New York City, NY

Utilized: Swift, SwiftUI, Objective-C, GIT, Python, Ace Editor

- Part of the core OS team responsible for privacy-preserving on-device analytics such as CoreParsec and Poirot
- Came up with the concept of, and lead the design and development for the Poirot IDE, our SwiftUI-based IDE for our Poirot analytics platform. This greatly simplified the onboarding experience of our partner teams.
- Introduced a SwiftUI-based frontend wrapping Amazon's Ace Editor, bringing full syntax highlighting and code editing to our SwiftUI-based apps on both desktop and mobile, improving user experience when writing analytics queries
- Implemented a Cross-Platform Multi-LLM chat client in SwiftUI to fully interrogate our internal LLMs along with their extensive parameter options in a user-friendly way. One main feature was simultaneous, parallel chats allowing testers to A/B test model parameters in real-time against all available models.

July 2020 to June 2022 (2 Years)

Software Engineer - Mobile App / iOS Widgets

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)

- Ground-up rewrite of Crestron Mobile UI as well as the networking protocol and rendering stack resulting in an overall memory reduction of 300% (11,000% in one area), 2,600% increase in speed, and supported project size was increased by 800%.
- Reached the #1 spot for both highest-grossing revenues and highest customer satisfaction in the Home Automation/Control category in the App Store
- Reached #31 in highest-grossing revenues worldwide across <u>all</u> categories
- Selected by Apple to appear in one of their international television commercials.
- * 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 (ESP: May 2007 to March 2009) (4 Years, 4 months)

Chief Software Architect / Team Leader

Porter Valley Software – Porter Valley Ranch, CA (Remote from NY/NJ area) **Environmental Service Professionals** – Washington (Remote from NY/NJ area) – *From 5/'07*Utilized C#.NET, VB.NET, SQL Server, SQLite, VistaDB, Exchange Server

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

- Led a team of five in designing InspectVue Reporter, a multi-platform dataaggregation and reporting platform for both Windows and Mobile (iOS and Android)
- Clients included US Military (used 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), and Environmental Services Professionals (used for inspecting their bank-owned housing during the financial crisis)
- After successful deployment of InspectVue to ESP's core business, ESP purchased Porter Valley Software for \$5 Million in cash and stock offerings.

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

Owner / 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.
- 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.

ADDITIONAL WORK EXPERIENCE (Summary)

July 2004 to Dec 2004 **Lead Developer**

(6-month contract)

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

Sept 2003 to Dec 2003 (4-month contract) **ASP.NET Reporting Intranet Architect / Team Lead**

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
Litilized C# NET ASP NET SQL Server 2000

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