Richard S. Witherspoon III

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January 2020 - Present

InterPro Solutions, Stoneham, MA

iOS Developer

- Developed new features such as multiple attachment uploading, supporting multiple ESRI basemaps, added Siri Shortcuts, and made critical bug fixes for our flagship product- EZMaxMobile, InterPro's enterprise app for clients who use IBM's Maximo asset management software
- Lead iOS developer for EZMaxRequest, an app that streamlines request management by enabling the initiation of a Maximo work request, picture uploads, real time chat with service providers, and mapping of service requests
- Creator and maintainer of InterProTools, an internal Swift Package framework to enable easy sharing of common code between our companies applications such as welcome screens, common extensions, QR scanner, and more.
- Work with QA, developers, designers and product/business managers to develop new features consistent with product roadmap and continuously improve our applications

Apple, Cupertino, CA

May 2019 - August 2019

16" MacBook Pro System EE

- Lead designer of a USB-C test board to stress system response with external fault injection, including concept development, schematic integration, and prototyping
- Schematic entry, BOM schematic configurations, and electrical constraint management using Cadence Concept & Allegro for the second generation 16" MacBook Pro
- MLB restoration and bring up using internal tools for characterization of electrical components
- Drove failure analysis at contract manufacturer in China for preproduction system assembly and testing

New York Air Brake, Watertown, NY

May 2018 - August 2018

Sales/iOS Development Co-Op

- Development and deployment of a product cross reference database for internal employee use, resulting in faster lookup times and customer retention
- Port of cross reference database to an iOS application for internal employees and customers
- Updated internal databases with information on existing products

IDEX, Rochester, NY

May 2017 - December 2017

Validation Engineer Co-Op

- Wrote C code validation tests for sensor hardware using Microsoft Visual Studio
- Developed automation tests for microcontrollers, resulting in 20x increase in the number of tests able to be performed
- Developed software scripts for data processing of ASIC microcontrollers
- Designed and developed a new database structure for test data

RELEVANT EXPERIENCE

NYAB Field Service: A contract opportunity to enabled New York Air Brake employees to easily submit, view, and export service records.

Study Sets: An easy and intuitive study application for iPhone and iPad that takes advantage of powerful swift APIs such as Vision, CloudKit, CoreData, Apple Music, and many more to enable a powerful feature set.

Cinematic: (Acquired mid 2021) Browse now playing, the most popular, upcoming, and most top rated movies of all time. Check different categories, search for any movie, save your favorites to your own personal collection, and create custom widgets. Coded in swift, it was original written with UIKit before pivoting to being entirely SwiftUI based.

Body Insights: An alternative iOS Health application, coded in Swift using SwiftUI.

Math Flash: An educational math application for elementary school children, coded in Swift.

RSWTools: A open source Swift Package to enable sharing of common code between my applications and test projects.

SFSymbols: A Swift Package for more easily working with Apples SFSymbol library

SKILLS

Software: Swift, SwiftUI, UIKit, Obj-C, HTML, CSS, C, Cadence OrCAD, SPICE, Simulink, MATLAB, AutoCAD **Hardware:** Oscilloscope, Signal Generator, Multimeter, Altera FPGA's, Network Analyzer, Raspberry PI, Arduino

EDUCATION

Rochester Institute Of Technology

December 2019

BS in Electrical Engineering,

BS in Economics