MICHAEL SHIELDS

SOFTWARE ENGINEER

EXPERIENCE

Nov 2018 – Present

IQ Inc.
Software Engineer
- Full-stack developer using C#, .Net Core 2.1, React/Redux. and MS SQL Server, for Pharmaceutical drug compounding device. Developed front/backend for the web application and the compounding device.
- Deployed software updates via Docker for Windows.
- Created Amazon Alexa skills that made use of AWS IoT to perform hardware operations on a remote hardware device.
- Demoed AWS project to a potential client, and created work estimates as part of a project proposal.

April 2017 – Nov 2018

BNY Mellon
Lead Developer
- Lead developer of Atlas, an automated build, test, and deployment service (CD/CI) that interfaces with Jenkins, Nexus, Git, and Docker/Mesos. Java (Spring), JPA, Hibernate, Kafka. Practice Agile/scrum with 2 week sprints.
- Developed frontend with Angular 5 / TypeScript using Material UI components and practices.
- Developed/helped design tool to allow non-technical users to generate customizable forms that are used company-wide. Deployed via Docker to corporate cloud running Marathon/Mesos.
- Ran several, and participated in, Workshops to facilitate learning about software practices and design.

July 2015- April 2017

Northrop Grumman
Software Engineer
- Wrote embedded software for an Airborne Warning system, added new UI functions for a radar system, and created new algorithms for a radar system to enable new radar modes in real time. C / C++, Eclipse, C#, Visual Studio 10/13.

PROJECTS

April 2018- Present

Snip-it
Android Application
- Application that allows users to record audio snippets to send to other users. Implements Google Play Services APIs to allow users to sign in via their Google account.
- Android SDK, Java, XML, Google Play Services, Firebase Authentication APIs, Firebase Realtime Database.

Dec 2016- Feb 2018

Pokecontacts
Android Application
- Application alphabetizes the user's contacts into a contact list. The user is able to select an avatar for each contact. New contacts are dynamically added.
- Implemented an indexed list for quicker navigation of finding contacts. Usual operations, like texting and calling, are supported.
- Internal storage operations allow the user to save/customize their contact list.
- Applied the Fresco library for better loading and displaying of animated gif files.
- Published to the Google Play Store.
- Android SDK, Java, XML, Fresco.

EDUCATION

University of Pittsburgh
Bachelors of Science – Computer Science
2011 - 2015

CONTACT

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- mtshields1@gmail.com
- mtshields1.github.io
- https://github.com/mtshields1

TECHNICAL SKILLS

Programming
Java (Spring, JPA, Junit4+)
C / C++
Python
C# (.NET Core 2.1, Linq, ASP.NET)
Javascript (AngularJS)
TypeScript (Angular4/5+)
HTML5 / CSS
SQL
Android SDK
WPF

Operating Systems
Windows
Linux
Android

Databases
Oracle
Postgres
Firebase
Microsoft SQL Server

Applications and Software
AWS
AWS IoT
Alexa Skills Kit
Intellij
Android Studio
Visual Studio Code
Git, Subversion
Apache Kafka
Hibernate
Maven, Gradle
Visual Studio
Docker