### **JOHN A CALDERAIO**

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# **SUMMARY**

I am a University-trained, Full Stack Software Engineer with experience writing algorithms in Java, JavaScript, C++, C, & Swift. I am well versed in Scrum & Agile methodologies. In addition, I have developed many web applications in React & Angular, & hybrid mobile applications using React Native & Ionic w/ Cordova. I also have experience creating fully native apps with Swift / XCode & Java / Android Studio.

I've worked with GraphQL & SQL on the backend, Jenkins as a continuous integration server, Redux to control state in React apps, Terraform to manage app's infrastructure, & Amazon Web Services to host apps on the cloud. I also use TDD (Test Driven Development) to ensure I am developing projects to the client's specifications.

#### **SKILLS**

Languages: JavaScript, Java, C++, C, Swift

Front-End Web: React, HTML/CSS, Flexbox, jQuery, SASS, Bootstrap

Backend Web: JSON, REST, Ajax, GraphQL, Apollo, Express, MongoDB, MySQL, AWS (Lamda &

CloudWatch)

State Management: Redux, MobX

Testing: Jest, Enzyme

Native Mobile Development: Xcode, Android Studio

Cross-Platform Mobile Development: React Native, Ionic, Cordova

**Design**: Sketch, Photoshop

Comp Sci Principles: Functional, OOP, MVC,

Other: Git, UNIX Shell, Visual Studio Code, NetBeans, Sublime, Atom, Postman, Insomnia

#### **EDUCATION**

## **Bachelor of Science in Computer Science**

University of Florida, Gainesville, Florida

GPA: 3.90/4.0

Summa Cum Laude with President's Honor Roll

## **Associate of Arts in General Education**

Palm Beach State College, Palm Beach Gardens, Florida

GPA: 4.0/4.0

Summa Cum Laude with President's Honor Roll

## PROFESSIONAL EXPERIENCE

- Developed and maintained codebase of two award-winning React Native mobile applications. One app lets a doctor manage their patients, while the other lets a patient manage their Healthcare Team. The Doctor and patient can message and video call each other with high quality video, even on slow-connections.
- Made apps HIPPA compliant, due to the presence of sensitive, Private Health Information (PHI)
- Developed web applications using the React framework including ReactNative and GraphQL
- Translate requirements into high-quality code and exceptional UI/UX presentations
- Propose approaches, tools and technologies to improve the development process and customer experience
- Optimize front-end code for maximum responsiveness and scalability
- Troubleshoot mobile platform compatibility issues and create resolutions
- Collaborate with architects, server-side developers, and systems engineers to deliver all technical requirements in a timely fashion
- Produce high quality technical documentation
- Tools: React / React Native / GraphQL / Apollo / Redux / Node / Yarn / NPM / Sketch / Lucid Chart / VS Code / GitHub

#### **IT Consultant**

March 2017 - September 2018

Empowered Prosthetics – Remote

- Non-profit organization dedicated to perfecting and personalizing bionics, and implementing solutions for disabilities for free or at greatly reduced costs
- Delegated tasks such as: Design of the logo, Design of the website, Creation of the website
- Assembled a team to design and code website in React
- Researching and implementing ways in which we can use AI to make the prosthetic move and feel more "life-like"
- Tools: React / Node / Yarn / NPM / Expo / VS Code / GitHub

## **Full Stack Engineer**

**February 2018 – June 2018** 

Cognosante (via Prodigy Resources) – Remote

- Participated in Scrum meetings daily to gauge the progress of each team member's assigned work
- Developed React app used by our Health Care clients to display useful data about hospitals and patients
- Employed AWS Lamda, CloudWatch, & S3 buckets to host app on the cloud
- Created endpoints using GraphQL, Apollo, & SQL (which was accessed from the React app) to access data in various databases
- Used Jest and Enzyme to test React components to ensure that the project was following our client's specifications
- Establishment of the DevOps practice by implementing fully automated CI/CD pipelines, leveraging tools such as Terraform and Jenkins to manage infrastructure and deployments.
- Tools: React / Node / NPM / Redux / MobX / GraphQL / Apollo GraphQL / SQL / PostgreSQL / AWS Lamda / AWS CloudWatch/ Jest & Enzyme / Jenkins

### **React Native Mobile Developer**

February 2017 – November 2017

Parametric Solutions – Remote

- Built an iOS/Android mobile application, which allows employees of Parametric Solutions to manage their work charges (Clients, Tasks, Dates, Hours Worked, etc.)
- Designed app using InVision, then prototyped a mockup in Sketch
- Created clever React Native components (such as tables with rows that change color depending on database update status)

- Learned about creating components, using REST calls, authentication, HTTP headers, Native iOS and Android modules, cross-platform features, styling rules with FlexBox, Node, Yarn, NPM, component "state", MobX, React Navigation, Expo, Promises, Async and Await, JavaScript libraries (such as Lodash, Moment, NativeBase, and much more)
- Github more than 3,400 lines added to repository
- Tools: React Native / Node / Yarn / NPM / REST / Expo / MobX / NativeBase / Atom / GitHub / Sketch / InVision / Photoshop

#### Founder and CEO

December 2016 – September 2017

Online Gainesville – Gainesville. FL

- Designed and developed website using Bootstrap and MaterializeCSS frameworks
- Acquired customers, such as SafeBriight and Parametric Solutions
- Generated over \$20k in revenue within first year of business (part-time only), without marketing or promotion
- Tools: Bootstrap / MaterializeCSS / JavaScript / jQuery / Sketch / PhotoShop / Atom / GitHub

## **AngularJS Mobile Developer**

**June 2015 – August 2015** 

IBM – Remote

- Helped develop a work portal (dashboard) which showed employee info and an overall view of tasks, services, processes, and claims
- Created custom directives specific to DOM manipulation, adding logic within controllers to communicate feedback to the user, and modifying angular services to retrieve variables used within the templates
- Met in daily scrum meetings where we discussed user stories and defects to ensure our objectives would be achieved by the end of each sprint
- Performed peer code reviews, requiring my approval before being released into software builds
- Tools: AngularJS / Cordova / Sublime / GitHub

# Java Software Engineer

**June 2014 – August 2014** 

Lockheed Martin - Orlando, Florida

- Designed and built an internal web app for the F-35 Lightning II Engineering Team
- Developed on JBoss using Java Servlets and JavaServer Pages within a team of software engineers
- Created functional use cases for the F-35 Lightning II Joint Strike Fighter's Autonomic Logistics Information System (ALIS) using Enterprise Architect
- Designed embedded systems utilizing Raspberry Pi, python, and circuits within a team of four to solve design challenges proposed by Lockheed Martin's Research and Development team
- Tools: Java / Java Servlets / Java Server Pages / JBoss Application Server / Windows Server / MySQL / Apache / Rasberry Pi / Python

### **Laboratory Chemist**

**August 2012 – August 2013** 

The Renewable Corporation - Lake Park, Florida

- Synthesized coatings that completely seal in asbestos surfaces, encapsulating hazardous materials
- Spearheaded research and reformulation team on project to increase slip resistance in all floor coatings
- Researched surface bubbling production anomaly with TRC's flagship coating product and submitted a comprehensive reformulation proposal that eliminated all inconsistencies
- Identified and corrected several situations in which pH fluctuation was affecting product shelf life, saving the company upwards of thousands of dollars per year
- Maintained stock supply levels and communicated directly with chemical distributors to optimize purchases and explore cost saving alternatives

Palm Beach State College - Palm Beach Gardens, Florida

- Led private chemistry, calculus, and physics tutoring sessions
- Worked diligently with students to increase their comprehension of complex concepts, resulting in an increase of one letter grade by most tutees

Sales Associate March 2008 – January 2011

Nordstrom - Palm Beach Gardens, Florida

- Consistently ranked among top sales representatives in region
- Winner of over six performance contests for highest overall net sales and highest ranking in customer satisfaction
- Performed market research to obtain knowledge of competing companies and to implement sales strategies

#### **PROJECTS**

# **React-Native vs Swift Apps**

September 2016

University of Florida, Gainesville

This was a University of Florida sanctioned research project. React-Native is Facebook's new hybrid mobile framework. It is unlike other hybrid mobile frameworks because it compiles the JavaScript to real Objective-C code for iOS and Java code for Android. Because hybrid mobile development is such a hot topic right now, and React-Native is the newest player to the game, I wanted to test how good it really was.

In order to do this, I made two identical apps - one in Swift and one in React-Native. I then used Apple Instruments to compare their performance and graph my findings. My findings showed that React-Native is in fact as performant as native iOS apps, and even slightly faster. I published a research paper summarizing my findings and was granted Summa Cum Laude highest honors for my work.

\*Read my paper at: <a href="https://medium.com/the-react-native-log/comparing-the-performance-between-native-ios-swift-and-react-native-7b5490d363e2#.a7mck7ig5">https://medium.com/the-react-native-log/comparing-the-performance-between-native-ios-swift-and-react-native-7b5490d363e2#.a7mck7ig5</a>

No Satellite GPS September 2015

University of Florida, Gainesville

This was a University of Florida sanctioned research project. My professor wanted the Computer Science department mapped in 3D on AutoCAD and stored in a Spatial Database for offline GPS traversal.

I Utilized Ionic, AngularJS, Cordova, and SpatiaLite's JavaScript library to create a hybrid mobile Spatial Database on iOS. The Computer Science Department/AutoCAD model was then imported as a GeoJSON object into the app. The use of the app could search for a room number (for example) and the app would retrieve the JSON data from the Spatial Database.

Shell in C April 2015

- For our Operating Systems class, we had to create a Shell to run on terminal in Unix.
- Made to imitate many of Unix/Mac's terminal functionality
- Written in C using Lex & Yacc

### **Turnup (Videogame Tournament Hosting App)**

March 2015

- Used Ionic & Cordova to create a cross platform application called "Turnup" to Find and Host local Videogame tournaments
- Wrote directives in Angular to serve data
- Developed CSS & JS responsive menu

Created member list via Parse API

## University of Florida Faculty Database Sharing Web App

January 2015

A web app for UF faculty, researchers, and grad students to share databases that they use. Users can also create a portfolio so that they can keep track of databases they use, as well as add databases that they find that other users have added.

## **Beats Captain Database Project**

September 2014

- Stored 110,001 tuples of music at random from the data on an Oracle DB backend
- Constructed a frontend using jQuery & Bootstrap
- Used PHP to guery the database & for input validation

FriendMesh March 2014

- In my Engineering Entrepreneurship course, I was chosen by my professor and Dean to accompany them to Silicon Valley and present my team's mobile app to UF Alumni Donors such as Chris Malachowsky (NVIDIA Creator) and David Faircloth (a Vice President at IBM).
- Wrote and filed provisional patent pertaining to the operation of mobile application

#### **AWARDS & AFFILIATIONS**

Staff Writer, Medium.com's "React Native Log" 2016 - 2020 2012 - 2016 **Summa Cum Laude & Presidents Honor Roll** 2013 - 2016 **Member**, Toastmasters University of Florida Chapter Member, Computer Information Security Team 2015 Martin Luther King Jr. Leadership Award, presented to the student who has made the most innovative contribution toward improving the lives of others in Palm Beach County 2013 2012 - 2013Vice President, Student Government Association **Outstanding Student Government Senator Award** 2012 Lead Project Engineer: NASA Reduced Gravity Education Flight Program, Florida Engineering 2012 Society

#### **INTERESTS**

- Blockchain/Cryptocurrency
- Blogging on Web Development
- Artificial Intelligence
- Machine Learning
- Deep Learning
- Augmented Reality
- Virtual Reality
- Video Games
- Mobile Development
- Autonomous Cars
- Progressive Web Apps