

SUMMARY

Experienced Software Engineer with a demonstrated history of working in the information technology services. Skilled in Development, Analysis and Problem Solving. Strong engineering professional with a Bachelor of Science degree focused in Computer Science from Florida Atlantic University. I am also currently enrolled to start my Masters Degree Program in Computer Engineering starting Fall of 2019.

TECHNOLOGY

Programming: Python, Swift, Visual Basic 6, SQL, C#, PHP, C++, CSS, HTML5, JavaScript

Frameworks: Django, SuiteCRM, phpMyAdmin, WordPress

Cloud Services: AWS, MS Azure, GitHub, Bitbucket, Trello, Office 365 Cloud

Software: PyCharm, XCode, Visual Studios, SSMS, RDP, Cyberduck, Office 365

Operating Systems: Windows, Windows Server, OSX, iOS

ENGINEERING EXPERIENCE

Kinetix Solutions, Coral Springs, FL

Software Engineer (September 2016 - present)

Started out as an Intern doing both IT and Development before I graduated FAU. I got promoted to a full-time position at the beginning of 2017. I took on both roles until the beginning of 2018 where I got promoted as a Software Engineer. Below are the projects I took lead and participated in developing during my time in Kinetix:

■ *Profox Oximetry (September 2017 to Present)*

Technology: VB6, Python, SSMS, Azure, RD, Bitbucket Server, Django

Profox is a medical, Visual Basic 6, desktop application software that aids in providing sleep generated reports from devices such as Oximeters and Capnometers. Acquired by one of our clients in September of 2017, I analyzed the application with very minimal available documentation to understand its inner workings along with external components that make up its system. I had to relearn the language during this process as well. After which, projects would be requested to make modifications to the software or add features to it.

Tasks:

- *Device Integration* – Devices are provided by manufactures along with their respective protocols. I study the protocols to understand the communication commands to extract the trend data from the device. Modifications will then have to be done on Profox to add the device as an option, integrate the protocol, parse the data into a readable graph and be able to generate a report.
- *Software Patch Development* – There were issues that some Profox customers having issues with some of the devices during pre-acquisition. I was able to make a patch with a solution and have it integrated with the affected clients currently installed versions using a python executable.
- *Server Migration* – The previous owners/developer were using outdated technology for their system. I migrated most of the systems components to Azure and updated the database, desktop CRM applications and database log utilities.
- *Future projects* –
 - Combine two version of the software into one.
 - Create a web application-based CRM utility using Django and Zoho.
 - Upgrade application source code from VB6 to VB.net.
 - Develop a web application version using ASP.Net or Django.

■ [Virtuox.Net \(July 2018 - Present\)](#)

Technology: C#, C++, Python, SSMS, Azure, Visual Studio 2015, SVN, Tortoise

This is an online, C#, web application used to collect data from oximetry devices and provide readable reports that help doctors determine whether a patient has sleep apnea or not. The application utilizes external written in Python and C++ to either extract data or perform calculations. It also stores data in an SQL database.

Tasks:

- *Report Generator* – There was a request to turn graphical EDF report files into a PDF report with patient information. I created an object-oriented python executable that with a custom Web API to extract patient information based on an existing session ID linked to the raw EDF report. The program then converts the report into readable text files with numerical data and plots a graph as an image and adds it to the final report with the patient information. Log files are created and updated during each execution, excess and unprocessed files are organized and in the event of an error an email would be sent out to the clients support group.
- *Sleep State and Respiratory Rate Calculation* – Data collected from a VPOD Dream Oximeter can be used to calculate a patient's Respiratory Rate and the state the patient was in during his/her sleep; awake, restless and restful. I worked together with another development group to get the algorithm to calculate such results. I then created an object-oriented python executable with built in SQL scripts and external store procedures to extract the sleep data from the database, run it through the algorithm, get the results and insert them back to the database. The results can then be used to generate a graphical report. The executable generates logs for each session and email errors upon occurrence.
- *Code vulnerability check* – Being a medical web application the site has be HIPPA compliant and I used Veracode tools to scan the source code for any vulnerabilities statically and dynamically. Based on the results I would make changes to code to remediate the application, rescan the code to see if the changes resolved the issue and present it to the site's developers to approve the changes.
- *Device Integration* – Integration was created through a custom Active X program made in C++. The integration would be made based on the devices protocol and features. I was learning the integration from one of the developers that created it in order for me to be able to do so for future projects.

■ [RoofDini.Biscayneroofting.com \(September 2018 – October 2018\)](#)

Technology: PHP, SQL, HTML5, MS Access, Azure, SuiteCRM, CSS, JavaScript, Bitbucket

This project is to develop an internal Customer Relations Management web application that mimics the client's current MS Access 2010 system. It's based on a PHP framework called SuiteCRM.

Tasks:

- *Front-end Development* – The framework allowed UI development directly on the site. I was able to create and modify new custom modules and modify existing ones as well to match project design and tie it to the back-end database.
- *Back-end Development* – Some features could not be created or modified through the front-end side of the framework and this would be resolved by making changes to the backend, testing/debugging functionality and connecting changes to the database. I created some modules through the backend as well.

■ [Clak \(October 2016 to present\)](#)

Technology: *Swift, PHP, AWS, phpMyAdmin, Cyberduck, XCode, Simulators, Bitbucket*

iOS application that is a secondary storage tool for Facebook, Instagram, Twitter and iPhone media files. The application was acquired during the fall of 2016, frontend created in Swift 2.3 and backend in PHP.

Tasks:

- *Front-end Development* – I converted the source code from Swift 2.3 to 3. Some functionality had to be changed to support compatibility with the different iPhone versions and their iOS. After some time, the application was redesigned with new colors and features. Eventually I migrated the language to Swift 4 after the iPhone X came out.
- *Back-end Development* – I did back end work to support and match frontend changes. This involved changes in the PHP code and the database in phpMyAdmin. I created a switchable test and production environment so that if changes are to be made on the server, it should not affect the live version of the application.
- *Amazon Web Services* – For this project I had to learn about AWS and I worked with their support group in order to get a good understanding on what had and what can be done to improve the application performance. I set some functionality in order to make the available services maintain themselves like applying Load Balancers and Auto Scalars
- *Updates and Deployments* – After the first release to the apple store some minor updates were needed to add features, modify functions or fix bugs. I also test the application with the latest iOS updates to ensure the app is compatible with any changes that apple made.

■ [Benefitool.com/Compass \(May 2017 – July 2018\)](#)

Technology: *ASP.Net, SQL, Visual Studio 2017, SSMS, Azure, Bitbucket*

Compass is a C# web application tool used to calculate insurance risks and plans for company employees. It uses a SQL database to store data and store procedures for data manipulation and calculations.

Tasks:

- *Front/Back-end Development* – The client would make requests to have changes done to the site or add features such as an extra control panel page or create restrictions for certain user groups. Also, some bugs would be noticed, and I would develop a fix for them.
- *Database management* – I would complete request to makes changes to the database. This involves creating/updating tables, scripts and store procedures.
- *Production Release* – There were four different development stages, local, Development, Stage and Production, with the local stage only being accessed by an individual developer. I was in charge of release all changes to production, but I would test the changes on each stage and get it approved before releasing.
- *Code vulnerability check* – Similar to Virtuox.net, the site has to be HIPPA compliant and I used Veracode tools to scan the source code for any vulnerabilities statically and dynamically. Based on the results I would make changes to code to remediate the application, rescan the code to see if the changes resolved the issue and present it to the site's developers to approve the changes.

▪ **WordPress Development (February 2018 – September 2018)**

Technology: - MS Azure, WordPress, HTML, JS, CSS,

I created websites using WordPress on Azure. The site is created based on how the clients, this is reflected on the design. If the client doesn't have a design in mind I would create one based on what he/she want to be achieved. Some features required needed extra scripting in JavaScript, HTML and CSS.

Sites:

- Nationwarranty.com
- Ancodentallab.com
- Diagnosticprofessionals.com

▪ **Managed Services Provision (September 2016 to January 2018)**

Technology: Azure, Office 365, Kaseya, Windows OS, Windows Server OS, Mac OS

As an IT Engineer I gained experience in providing services to clients, outside of development. I started this position as an intern before I worked my way up.

Tasks:

- **Tier One Support** – I answered phone calls to create new tickets and responded to tickets to resolve basic hardware and software trouble shooting tasks. I also managed user accounts on Active Directory and Office 365.
- **Tier Two Support** – Some task would be escalated to a second level which would involve a lot more work than as a tier one. Such tasks include email migration, work delivered from Tier One, onsite services, server management, firewall and VPN access management and providing support after hours for a week on select weeks.

Florida Atlantic University, Boca Raton, FL

Computer Science Major (September 2014 – December 2016)

▪ **Principles of Software Engineering, Group Project: EmoPlay (Fall 2016)**

Technology: Angular JS, Atom, GitHub, HTML

A facial recognition web application that plays music based on a user's facial expression. We designed and created to play a resolving musical solution to the user's emotion keeping them on a positive note. The site was created using HTML and JavaScript. Once a person's emotional expression is captured an emoji representing the emotion and then a song played based on it.

▪ **OOP & Design Patterns, Group Project: MrFitness (Fall 2015)**

Technology: PHP, Java, LampServer, Simulators, Android Studios, phpMyAdmin

Android application that connects the gap between personal fitness trainers and their clients. The app can be used for communication and keeping track of clients' workouts and progress. We designed it from scratch from its system requirements to the UI functionality. Frontend was created in Java and UI was testes using Android Studio. The backend is in PHP and we used phpMyAdmin as it database. It was established to enable communication and data storage.

▪ **Internet Computing, Multiple Site Projects (Summer 2015)**

Technology: JavaScript, PHP, HTML, phpMyAdmin

Created multiple web sites to understand the workings and creation of Web related sites and applications. Among these projects include a web application that mimics the functionalities of Instagram such as adding friends, upload videos, view profiles and view timelines.

Capture Program Mentor (September 2016 – December 2016)

As a mentor I would tutor other students in their respective computer science classes such as Fundamentals of Computer Science, Data Structures, Python Programming and Object-Oriented Programming & Design Patterns

Pioneer School, Maragua, Kenya

Computer Studies, Project: School Database (Summer – Fall 2010)

Technology: *Visual Basic, MS Access*

This is high school project that was graded nationally together with the nation high examination, equivalent to SAT exams in the US. The project entails the design and creation of a school database system using Microsoft Access and Visual Basic. The system allows data entry, production of reports, calculation of final grades and view/edit student records.

OTHER EXPERIENCE

Velocity Martial Arts

Taekwondo Instructor (May 2014 – September 2016)

I started off as an after-school and summer camp program instructor to a senior instructor. I taught Taekwondo together with a variety of other martial arts such as JiuJitsu and Capoeira. I still practice the arts improve my skills. I apply the same concept of constant learning in Software Development in order to advance what I already know.

EDUCATION

Florida Atlantic University, Boca Raton, FL
Master of Science in Computer Engineering.

(September 2019)

Florida Atlantic University, Boca Raton, FL
Bachelor of Science in Computer Science.

(September 2014 –December 2016)

Broward College, Coconut Creek, FL
Associate Degree in Computer Science.

(May 2012 –August 2014)