

# Mark S. Melendez

mmelendez@incursustech.com

GitHub: <https://github.com/mark1044>

LinkedIn: <https://www.linkedin.com/in/mark-sthephan-melendez/>

## SKILLS

### Programming Languages

- C#
- PHP
- C
- Java
- Python
- JavaScript
- Dart
- MATLAB
- Wolfram Language

### Frameworks, Libraries & Databases, and hard skills

- Spring MVC
- Node
- ASP.NET - MVC
- AngularJS
- VueJs
- React
- Backbone
- Liferay
- MySQL
- Oracle
- MongoDB
- Redis
- Elasticsearch
- Flutter
- Nativescript
- GraphQL
- Numpy
- Pandas
- Jupyter
- ND4J
- Kubernetes
- Cloud Integration
- Heroku
- JHipster - Microservice Architecture
- VueJS

- Apache Spark
- AWS
- Azure
- Azure Functions - Serverless Architecture
- Lambdas - Serverless Architecture
- DICOM and Advanced Imaging
- Android

## Software Development and Experience

- Agile development
- SCRUM

## LANGUAGES

- English
- Spanish

## Active Secret Clearance

## EXPERIENCE

### **INCURSUS Technologies LLC**, Orlando FL — *Self Employed*

*Aug 2017 – Present*

#### **ITEC - KIOSK**

I developed an Android application for ITEC Entertainment.

- Android
- Java

#### **VIP - DICOM PACS**

I created a Java DICOM PACS server and web application. This server stores, indexes, and analysis DICOM data, while the web app makes statistics and medical imaging data available through a modern UI/UX.

- DICOM
- Java Plugin Architecture
- Serverless Architecture
- Azure Functions
- Azure
- VueJS

#### **USC PATCH APP**

I created a Java Spring application that updated our clients QuickBooks Online inventory items based on their WASP InventoryCloud inventory. I leveraged the QBO and InventoryCloud APIs to create a bridge

between the two SaaS solutions.

- Spring MVC

### **USC & Me Mobile APP**

I created a Flutter Mobile App for our client USC. Which allows their customers to schedule appointments with technicians.

- Flutter
- Dart
- JHipster
- Java Spring
- Mongo
- Firebase
- Angular

### **Cole Engineering Services Inc, Orlando FL — Software Engineer**

*Nov 2017 – Mar 2019*

### **PROTEUS**

I was a software developer for DARPA'S Prototype Resilient Operations Testbed for Expeditionary Urban Scenarios (PROTEUS) TA3 contract. Which is a parametric data service that stores models and tactics, techniques for simulation purposes.

- Spring MVC
- AngularJS
- MongoDB
- Elasticsearch
- Nativescript
- GraphQL
- Numpy
- Pandas
- Jupyter
- ND4J
- Kubernetes
- Cloud Integration
- Python
- C++
- JavaScript
- Java

### **OneSAF**

I was a software engineer working on the Army's OneSAF contract "OneSAF is a next-generation, entity-level simulation that supports both Computer Generated Forces and Semi-Automated Forces applications."(PEOSTRI)

- Linux
- Java
- Node
- JavaScript
- Java

### **INCURSUS Suppliers, Puerto Rico**

*April 2017 – Present*

I was a founding member of INCURSUS Suppliers, a drop shipping company that sold sportswear. I worked on logistics and product acquisition.

## **Imagine Believe Realize, Orlando FL — *Software Engineer***

*June 2016 – April 2017*

While working in IBR I was a U.S Navy contractor and worked on the 'My Navy Portal' (MNP) contract. MNP is the Navy's human resources portal for all Navy men around the world. I worked on MNP as a full stack developer. As an engineer in the project I was part of an Agile semi-remote environment, therefore I am well versed in Agile/SCRUM development.

- Liferay
- MySQL
- Oracle
- JavaScript
- Java

## **EDUCATION**

### **University of Central Florida, Orlando FL — *B.S. Mathematics***

2013-2016, GPA: 3.6

I majored in Mathematics with a concentration in computational mathematics.

### **Valencia College, Orlando FL — *Associate of Arts***

2011-2013, GPA: 3.9

I obtained my Associates from Valencia College with a focus in mathematics. Furthermore, I was part of the Phi Theta Kappa honor society.

## **PROJECTS INCLUDE**

### **VIP - DICOM PACS**

We created a Java DICOM PACS server and web application. This server stores, indexes, and analysis DICOM data, while the web app makes statistics and medical imaging data available through a modern UI/UX.

### **USC & Me Mobile APP**

We are creating Flutter Mobile App for our client USC. This allows their customers to schedule appointments with technicians and track their locations.

### **USC PATCH APP**

We created a Java Spring application that updated the our clients QuickBooks Online inventory items based on their WASP InventoryCloud inventory. We leveraged the QBO and InventoryCloud APIs to create a bridge between the two SaaS solutions.

### **PROTEUS**

DARPA'S Prototype Resilient Operations Testbed for Expeditionary Urban Scenarios (PROTEUS) TA3 contract. Which is a parametric data service that stores models and tactics, techniques for simulation purposes.

## OneSAF

Army's OneSAF contract "OneSAF is a next-generation, entity-level simulation that supports both Computer Generated Forces and Semi-Automated Forces applications."(PEOSTRI)

## Patch App

This is an application I created for a customer and it bridges his inventory cloud-based software to his Quickbooks Online. For more details please ask me.

## My Navy Portal (MNP) — *U.S Navy Contract*

U.S Navy's human resources portal MNP is a large scale online platform that allows Navy men worldwide to plan their retirement, seek out information about their education options, reserve educational rooms in different military bases, and more.

## GPS Positioning Algorithms — *Open Source Research*

The available code on GitHub uses satellites as reference points and known info to locate a user on Earth. Two methods to solve for the user's location. [Found on GitHub]

- MATLAB

## Sine-Gordon Numerical Solutions — *Open Source Research*

Numerical solution of the Sine Gordon Equation, the special analytical solutions are presented, we solve for the "Kink-Kink-Collision" soliton solution through the use of a hybrid scheme composed of the Lax-Wendroff scheme for the first time step and the [Box-Scheme, Crank-Nicolson-Scheme] for the remaining time steps. We utilized Dirichlet boundary conditions and a given initial condition. [Code found on GitHub]

- MATLAB

## Fractal Image Generator — *Open Source Research*

Generates a fractal image based on complex analysis and numerical methods. [Found on GitHub]

- MATLAB

## Glaucus

I and a colleague did research in soft robotics and created the silicon-based Glaucus robot after building our own 3D printer through the use of a startup kit. Thus, I have experience with an embedded systems, robotics, and 3D printing.

