Francisco Burgos Collazo

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Objective

To achieve the company's mission or goals by using my leadership skills to design, implement, and solve complex engineering problems.

Education

BS IN ELECTRICAL ENGINEERING | JUNE 29 2016 | POLYTECHNIC UNIVERSITY OF PR

- Major: Control System Specialist
- Related coursework: Neural Networks, Control System Design, Process, Control & Inst., Power Electronics, Motor Controls.

Experience

SOFTWARE DEVELOPER, TELECOMUNICATIONS ANALYST | OPTIVON INC. | 01/16 – 04/17

- In charge of developing, designing, and debugging web applications based on telephony systems and police tips. Also maintaining linux based VM's in AWS which gave a number of back end services.

3D PRINTER INSTRUCTOR | REPRAP PR | 05/15 – 11/15

- Gave 3d printer seminars to children in which they learned the benefits of a 3d printer and CAD tools for the maker movement.

CIRCUITS AND COMPUTER PROGRAMING INSTRUCTOR | POLYTECHNIC UNIVERSITY OF PR | 08/14 – 05/15

- Gave 3d printer seminars to children in which they learned the benefits of a 3d printer and CAD tools for the maker movement.

Relevant Knowledge

JAVASCRIPT
PYTHON
NODE.JS
ANGULARJS
LINUX

AMAZON WEB SERVICES
FRONT-END
BACK-END
SCRUM (AGILE)
FIREBASE

Projects

IOT CONNECTED HOME | POLYTECHNIC UNIVERSITY OF PR

· Smart home system made for end of career project (Capstone). The system itself contained an alarm system, an RFID based recognition system, energy monitoring, light control, RF control, and an integrated DB. This system was remotely controlled by a basic android application and enable house hold members to control different systems around the house.

SENTIHELM| OPTIVON INC.

· Sentihelm is a tip submission system for the Puerto Rico Police Department. Through this system police can review text, video, and photo tips for the different crime activity around the country. I worked on the admin panel which showed tips for the different regions covered by the different police departments around the island.

MERCURY APP | OPTIVON INC.

· Mercury is an app designed for any company that has a CRM based clientele. It has a SIP softphone integrated which can be used to call your clients or simply make appointments. After the call is completed it auto-logs to the company's CRM valuable data which can be later reviewed by a seller looking for leads. In this project, I was in charge of the web softphone which needed a WebRTC to SIP gateway. For the client, an open-source platform called Janus was used, which transcodes the two protocols; giving the client audio and video call capabilities.

MERCURY SIP PROXY | OPTIVON INC.

· When developing Mercury the IOS 10 platform was launched which introduced a roadblocked for us by deprecating the use of open sockets when the app is closed. The new suggested way via the APNS service introduced a need for a SIP proxy capable of sending push notifications. The manager put me in charge of the task and the proxy was developed using python. This server is capable of sending push notifications, talk to the company's registrar server, and perform signaling for the softphone.

Self-Taught Knowledge

RFC 3261 COMPLIANT PROXY

AQMP RABBITMQ SERVER AND CLIENT

REGULAR EXPRESSIONS

DEBIAN LINUX

UBUNTU LINUX

PHP

CSS

REST API DESIGN

CRONTAB

BASH AND SHELL SCRIPTING

LINUX COMMAND LINE

SOCKETS

WEBRTC

HTML

HTTP

IOT DESIGN