

MANUEL ALEJANDRO DÍAZ SERRET  
28929 Scotten Road Farmington Hills, MI 48336  
cellphone:(313)-288-0759, Email: [serret887@gmail.com](mailto:serret887@gmail.com)  
Permanent Work Authorization. No VISA sponsorship required

## OBJECTIVE

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Seeking a programming position where I will be involved in the software design using new technologies, grow as a developer and contribute to the goals of the company.

## PROFESSIONAL PROFILE

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An accomplished problem solver and decision maker, analytic & detail oriented, quick learner who masters new technologies. Has strong programming skills, able to work well with minimal supervision, meet deadlines and handle multiple projects implementing flexible solutions. An effective team player with exceptional communication, planning and execution skills coupled with a systematic approach and quick adaptability. Motivated by challenging projects and opportunities to learn.

## CORE COMPETENCIES

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Object Oriented Programming	UI/UX design	Software Testing & Troubleshooting
TDD/BDD Development	Performance Code Based	Concurrent Programming
Api design	Real time Data Collection	Agile
Software Development LifeCycle	Embebed System (HMI)	SOLID/DRY

## TECHNICAL SKILLS

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**Programming Languages:** Java, Python, JavaScript, Assembly, C, SQL(MySQL, SQLite), NoSQL(MongoDb), MATLAB, C#, HTML5, CSS3.

**Framework:** Spring MVC & REST, Android, AngularJs, Hibernate ORM, Asp.Net MVC & Web Api2, Entity Framework ORM, Bootstrap, HTML5, CSS3, JSP.

**IDE:** Vim, Eclipse, Visual Studio, IDEA JetBrains flavors, Android Studio.

**Tools:** GIT, Gradle, Maven, Jenkins, Proteus and Ares Instrumentation designer, AUTOCAD.

**Environment:** Linux (Fedora), Window, Mac.

## PROJECTS

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**Management App:** Android and AngularJS App connected to Hotel REST Api with SCADA data report.

**Movie Guide App:** Help user to stay informed about news in the movie world, and make search by name and genre using Android, Volley, REST, JSON, Sync Adapter, Loaders, Content Providers.

**Chat App:** Leverage the power of Socket.io in an Android app with a Node JS backend supporting text and binary data.

**Sunshine App:** Weather forecast app using REST, Localization services, Content Provider, Maps, Notifications, Share Content, Android.

**Python Scraper:** Crawling for different website to fetch links for free movies. Python, Selenium, PhantomJS, MongoDB.

**Library Management System:** Spring MVC, Spring REST, Hibernate, AngularJs, JSP, HTML5, Bootstrap and MySQL.

**PhoneCat:** Angular Google Course merge with Web API 2, ado.net, entity framework, Microsoft SQL Server.

**Berlinas del FONDE:** Migrate back-end website from asp.net webForm to asp.net MVC, saving thousands of dollars to the company.

## WORK EXPERIENCE

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### NONPROFIT ORGANIZATION VOLUNTEERING

April 2015 - Present

Free Code Camp

Code for America

- Solving civic issues by code
- Helping nonprofit organization to solve code issues and save money

## **HOTEL LA PLANTACION DEL SUR & HOTEL VALLEMAR**

**August 2013 – March 2014**

*Advisory Consultant for two large (400+ room) hotels Tenerife (Spain)*

- Create a Java Spring RESTful service deploy in Apache Tomcat for monitor SCADA logs.
- Increased collaboration and teamwork of the members of the maintenance departments
- Completed services successfully receiving a reduced energy consumption by 10% at the hotel after a period of 5 months.

## **IBEROSTAR**

**September 2012 – June 2013**

*Project Developer*

- Saved approximately \$40,000 per year in energy consumption and decreased 18 tons of CO2 air emissions by implementing a predictive controls over the consumption variable directed to the reduction of energy usage. Recognized as best program for energy savings.
- Programmed a Matlab script capable of calculating the thermal load of the entire building, analyzing independently each room of the building. Design a predictive control block.

## **UNIVERSITY COOPERATIVE EXPERIENCE (HAVANA-CUBA)**

**August 2010 – March 2013**

### **Co-project Developer -REFINERY “NICO LOPEZ” CUPET SA.**

- Compared the mathematical simulation model of the furnace against actual readings taken from the process
- Detected errors of operation, programming, and corrected them in the PID. Fixed and implemented redundant protections to improve the life of the furnace. Separated protection system of the process control to avoid failures

### **Project Developer-WATER TREATMENT PLANT QUIMEFA**

- Developed project to increase the storage capacity of the plant by calculating new values for calibrating the PID control algorithm, and perform analysis report.
- Increased production of treated water to target of 15%.

### **Project Developer – Cubana de Acero, Steel factory.**

- Repaired the control system of the boiler increasing of the overall production by 10% by changing control hardware to a PIC18 and programmed adaptive control in the new hardware using C.
- Detected programming errors and corrected them to fit client specifications, and assist in Q/A.

### **Project Developer – Cold Storage facility at Port.**

- Developed and presented proposals for improving the installation of new sensors, performing functional and block diagrams of the installations and validating the implementation of the system.

## **DEGREES AND CERTIFICATES**

**Full Stack Web Developer**

***Free Code Camp***

*2015 - 2016*

**Electrical Computer Engineer**

***José Antonio Echeverría CUJAE – La Habana***

*September 2008-August 2013/GPA: 4.01.*

**Adaptive Control**

***José Antonio Echeverría CUJAE – La Habana***

*January 2011 - April 2011/ 120 h*

**Programming of PIC18**

***José Antonio Echeverría CUJAE – La Habana***

*May 2011 - July 2011/ 90 h*

## **LANGUAGES**

**Spanish**

***Native Language***

**English (Advanced level)**

***José Antonio Echeverría CUJAE – La Habana***

**French (Beginner level)**

***French Alliance***

## **REFERENCES UPON REQUEST**