Roger **Solis**

(979) 492-6285 | roger.fesca@gmail.com | http://rochosc.github.io/ | rochosc | 6506756/roger | roger-solis

Summary

Computer scientist and software engineering enthusiast with over 8 years of programming experience, 2 years of research experience, and 1 year of industry experience. Worked extensively with Android/Java, Python, JS, MATLAB, Objective-c, SQL, and MongoDB. Fluent in English and Spanish.

Work Experience

Texas A&M University

College Station, Texas, USA

Research Assistant

Aug. 2018 - PRESENT

- Research on applied Machine Learning on data collected from wearable devices.
- Android app development for smartphones and wearable platforms for improved data collection and annotation.
- Lead author on "A Human-centered Wearable Sensing Platform with Intelligent Automated Data Annotation Capabilities", accepted at IoTDI 2019

Texas A&M University

College Station, Texas, USA

Grader

Jan. 2017 - May 2017

- Grader for upper-level Operating Systems course at Texas A&M University.
- Responsible for grading quizzes, midterms, and programming assignments of 60 students.

Kwan Tecnologia

Merida, Yucatan, Mexico

Software Engineer & DevOps

Sep. 2015 - Aug. 2016

- Worked on innovation group using MEAN stack for feature development and Mocha for unit testing.
- Responsible of continuous integration using Jenkins and database management.
- Responsible of AWS instances creation and management for diverse team's needs.

DevOps

- Remote DevOps at Agralogics located at CA, USA.
- Fixed and restored the daily automatic deployment process of new AWS instances after being broken for 4 months, saving developer's time.
- Maintained the web app, existing scripts, and deployed new app instances for specific team needs.
- Worked mainly with bash/python/ruby scripts, Git, Jenkins, and Docker containers.

Projects

iOS ResearchKit contribution

- Added a camera-based PPG capture module to Apple's open-source ResearchKit library written in Objective-C to help users to get heart rate estimates using their phone.

Final project for an Intelligent User Interfaces course

- Created an Android app and a back-end service using Flask, a Python based framework which determined email's stressfulness based on sentiment analysis.
- Adapted UI dynamically to show users which emails they should reply to based on current stress levels measured via a wearable sensor.

Final project for a Pattern Analysis course

- Created a dynamic regression model on MATLAB based on accelerometer information for heart rate prediction when exercising.
- The aim was to reduce energy consumption from smartwatches when using PPG by turning off the sensor and using the prediction model instead.

Biofeedback using robots and wearable sensors

- Built a relaxation app for Android that controlled a robot whose movements were influenced by the user's breathing obtained through a Bluetooth wearable sensor.
- The app taught the users to breath at proper rhythm to reduce their stress levels.

Final project for a Computers and New Media course

- Created a web app using HTML5, JS, Bootstrap, and Flask.
- The website had the goal of helping users to record video testimonials through a user friendly interface and to share them with other users.

Education

Texas A&M University

College Station, Texas, USA

M.S. in Computer Science, GPA 3.75/4.0

Expected May 2019

- Research assistantship with stipend - 1 year.
- Scholarship from the federal government of Mexico, through the National Council of Science and Technology (CONACYT) - 2 years.

Autonomous University of Yucatan

Merida, Yucatan, Mexico

B.S. in Computer Science, GPA 3.64/4.0

August 2015

- Valedictorian, Computer Science, class of 2015.
- INTO internship by the Mexican Chamber of Electronics, Telecommunications and Information Technologies (CANIETI) to study abroad for 3 months at Texas A&M.