# **JOSE A SANTOYO GUILARTE**

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**OBJECTIVE** Seeking a challenging position where I can apply my knowledge and practical abilities regarding software and hardware engineering, which will contribute to my personal and professional growth.

#### **EDUCATION** | CARLETON UNIVERSITY OTTAWA, ON

BACHELOR OF COMPUTER SYSTEMS ENGINEERING 2011-2017

### TECHNICAL SKILLS

- Basic working knowledge of Linux OS
- Computer networking and layered protocols architectures
- Microsoft Office (Word, Excel, PowerPoint), Visio
- Programming Languages (Java, C++, python, html5, JavaScript, Angular, Assembly), UML
- MatLab and Simulink
- Xilinx ISE Design suite and OrCAD Cadence
- ProE 3D modeling software
- Arduino IDE software
- Verilog HDL

### WORK EXPERIENCE AND PROJECTS

## Medical Glossary for aboriginal interpreters web app 2016

- Developed a web application which functionality is to provide translations of medical terms from English to Cree language.
- Worked on basic knowledge of html5, CSS, AngularJS and JSON database
- Contributed with the design of the relational database used in the project.
- Worked in an agile environment.

#### Linux OS 2015-2016

- Built a producer/consumer program using C language.
- Implemented different scheduling policies with the purpose of study concurrent programing and message passing.
- Analyzed concurrency in a Linux environment and gained knowledge of IPC in distributed systems.

### Systems Development - Liquid flow meter 2015-2016

- In this project a remote liquid dispenser system was designed and developed. Two Raspberry Pi microcontrollers were used to allow communication between the remote client and server via UDP IP protocol.
- Interfaced raspberry Pi with the electronic components of the dispenser valve.
- Collaborated with the implementation of the GUI using Java language.
- Programmed a client/server UDP IP communication using Java and python.
- Solved IPC issues related to the concurrency of the program.
- Strengthened communication skills and ethical team collaboration.

# Real Time concurrent Programming - Client-Server FTP 2014-2015

- The purpose of this project was to learn the concepts of concurrency granularity.
- Differences between Processes and Threads using Java virtual Machine, to exploit parallelism within a system.
- Implemented FILE TRANSFER PROTOCOL (FTP) in a Client-Server based program interface, using Eclipse API and java language.

MATLAB and SIMULINK 2013-2014

- Experienced in dealing with Laplace Transforms, Transfer Functions for Dynamic Systems, Simulation through analogous systems and analog computers(mechanical and Electrical System) using. Analysis of Pole and Zero Locations of a System in Transient Analysis. (in MATLAB and SIMULINK).
- Built models for performing DSP and analyzing discrete-time systems and filters.

# COMMUNICATION SKILLS

- Composed written suitable, logical, and comprehensive response to requirements as part of the course assignment of Communication Skills for Engineering Students (CCDP 2100).
- Presented in front of audiences adapting style and tone accordingly.
- Ensured accuracy of content during presenting and adapted the level of complexity relevant to the audience.

# LEADERSHIP | EXPERIENCE

## Inspira youth leadership conference 2016

SUB-COORDINATOR

- Worked along with coordinator on a shared responsibility. Managed the executive team
- Helped each team member with their tasks, provided logistics, and any resources needed to the team of volunteers.

## **Humanitarian Organization of Latin American Students (H.O.L.A.S)**

VICE PRESIDENT EXTERNAL AFFAIRS, 2014-2015

- Responsible for the communication and collaboration with other organizations.
- Organized fundraising events for humanitarian programs in Latin America.
- Coordinated meetings and organization for the cultural events committee.
- Maintained H.O.L.A.S website and managed social networking for the organization.

# VOLUNTEER EXPERIENCE

#### **LOCURA LATINA FUNDRAISER GALA 2014**

H.O.L.A.S CARLETON

• Collaborated in the organization of a fundraising Gala event for over 550 people.

## **LATIN FEST WEEK-CARLETON UNIVERSITY 2014**

H.O.L.A.S CARLETON

- Planned and organized the week-long schedule of cultural shows and performances.
- Engaged in public speaking for large and small audience attendees.