SERGIO MORALES

(951) 743-1759 • Escondido, CA, USA • sergio.1.morales@gm.com www.sergiomorales.me • www.linkedin.com/in/smoras

EDUCATION

UNIVERSITY OF CALIFORNIA, RIVERSIDE

Bachelor of Science Degree, Computer Engineering
Chancellor's Honor List

Major GPA: 3.4/4.0

Riverside, CA

Graduated, June 2015

Overall GPA: 3.2/4.0

SOFTWARE & TECHNICAL SKILLS

C (3+ years in Embedded Sys.)

Python (Networks/Algorithms)

Objective C (iOS Development)

Breadboard/PCB Prototyping

Fluent in Spanish and English

C++ (5 years experience)

HTML/CSS & JavaScript (3 years)

Assembly (6502/MIPS Programs)

Circuit Analysis

Java (Android Development)

VHDL/Verilog (FPGAs)

GNU/Linux Shell

MATLAB & Simulink

PROFESSIONAL EXPERIENCE

Algorithm/Software Engineer – July 2015– Present

Propulsion System Integration Software, Controls, & Calibration – General Motors

Responsible for developing software and algorithms that control multiple actuators in a way that optimizes fuel economy, emissions, and drivability. Specific responsibilities include developing embedded C software for fuel level sensing and engine immobilizer (vehicle theft deterrent) features. This includes requirements analysis, in-vehicle or unit testing, and version control. Utilized Matlab, Simulink, Eclipse, INCA, and IBM Rational suite tools. Based in Milford, MI, but work remotely from Escondido, CA.

IT Student Worker – June 2013– June 2015

Department of Information Technology – UC Riverside Extension

Assisted the department in implementing automation of software through scripting in PowerShell and aided in improving workflow of staff by troubleshooting through helpdesk tickets. Responsibilities included hardware setup and installation, with network routing and cable management for labs.

PROJECTS

Integrated Appliance System (IAS)

September 2013 – June 2015

Second place awarded in SMI's Design & Manufacturing Contest, and winner of UCR's Sustainability Fellowship Award. In charge of implementing ATmega microcontrollers and circuits that utilize feedback control to actuate the appliances in a way that allows the end user of the IAS to monitor the temperature, humidity, and energy usage.

Nintendo Entertainment System FPGA Emulator Summer Study Abroad 2014 – Lausanne, Switzerland Implemented an NMOS 6502 microprocessor in C; using Altera's Nios II processor IP core. Worked in a team of five and to establish a stable version of the project that rendered images using Verilog.

UCR Chatline – An iOS Social Media App for UCR September 2014 – December 2014 Created an iOS phone app that allows the users to group chat, video call, post status updates, and add users as friends.

AFFILIATIONS

Society of Hispanic Professional Engineers (SHPE)

September 2012 – Present

Webmaster & Internal Affairs

Took charge of establishing and maintaining connections with any organizations and alumni within UCR. Also lead a team of members in providing a website for the organization, hosted on the school's servers.

Institute of Electrical & Electronics Engineers (IEEE) – General Member **Association for Computing Machinery** (ACM) – General Member

AWARDS & CERTIFICATIONS