10380 Maya Linda Road
San Diego, CA 92126
www.github.com/salazaru

Uriel Salazar

(909) 202-9661
uri.salazar.a@gmail.com
www.urisalazar.com

Education

San Diego, CA **University of California, San Diego** **Sept 2019 – Present**

- **Major**: Electrical Engineering, B.S. (*expected June 2022*)
- **Depth**: Machine Learning & Controls
- **Coursework**: Digital Design, Circuit/Systems Theory, Embedded Sys. Programming, Signal/Image Processing

Riverside, CA **Riverside City College** **Feb 2014 – June 2019**

- **Certificates**: Java / C++ / Computer Programming (GPA: 3.72)
- **Coursework:** Discrete Math, Computer Arch., Data Structures, Advanced Objects, Software End-User Support

Work Experience

Summer Researcher, Intern **University of California, Riverside** **June 2015 – Sept 2015**

Program Title: "Research Experiences in Integrated Computational Entomology" PI: Dr. Eamonn Keogh

- Detected Aedes Aegypti mosquitoes using image segmentation and histogram modification to aid in the prevention of the dengue virus in South American and African regions since no vaccine exists.
- Designed and modeled various signal processing algorithms and scripts to analyze microscopic camera data.
- Incorporated statistical data using the R programming language, MATLAB, and the image processing toolbox to increase the efficiency of insecticides by predicting future territories of mosquitoes.

Supplemental Instructor **Academic Support** **July 2017 – June 2019**

Free walk-in services and resources to help community college students succeed in their STEM courses.

- Composed an additional two physics lectures each week in classical mechanics and thermodynamics.
- Facilitated learning strategies such as breaking the dependency cycle between the students and the professor.
- Applied concepts from neuroscience such as moderating stress and focusing on sleeping/nutrition patterns.

Projects

yourTA Online **October 2019**

"Your Trash Assistant Online" (https://github.com/salazaru/yourTA)

- Developed a sensor-based recycling scoreboard concept for university campuses by constructing a prototype circuit that included multiple sensors to measure the frequency and volume of proper recycling.
- Developed a Node.js server to display updated sensor values in real-time via the ESP8266 Wi-Fi controller.
- Utilized the HttpClient, Wi-Fi, and JSON libraries when writing the program for the prototype circuit board.
- Prototyped planned features such as Mongo Database, Flask on PythonAnywhere, and Amazon Rekognition.
- Won the Northrop Grumman Award for "Best IoT That Incorporates Multiple Nodes;" the entire project was built from scratch in 36 hours by a two-person team at SD Hacks 2019.

Syrus - NASA SUITS Design Challenge **Sept 2018 - April 2019**

Spacesuit User Interface Technologies for Students (https://github.com/Stents-/SyrusSUITS)

- Developed a navigation system that included pathfinding, virtual arrows, user interface, and a 3D mini-map in C# and Unity to assist astronauts aboard the International Space Station complete specific objectives.
- Main Technologies included the Microsoft HoloLens and the Leap Motion hand-tracking sensor.
- Implemented a model-based engineering process involving intricate troubleshooting and debugging phases.
- Syrus was the only two-year college representative from the 13 institutions selected for on-site testing at the Houston Space Center based on our proposal's technical writing and creative design process.

Sorry! **May 2015 - Present**

Character-based implementation of the popular board game (https://github.com/salazaru/sorry)

- Developed an AI in single-player mode that incorporates multiple methods to counteract the opponent.
- Initially a final course project that is being continually updated as I learn more about programming and CS.

Skills

Sftware/Hrdware: Solidworks, EagleCAD, Vivado / Soldering, 3D Printing, Laser Cutting, Arduino Uno/Mega2560
Prgrm Languages: (*fluent*): Java, C++ (*tourist*): Python, HTML/CSS, MATLAB, C#, R, JavaScript, SQL, Verilog, PHP
Spoken Languages: (*fluent*): English, Spanish (*tourist*): Japanese