# **Uriel Lua Cervantes**

512 216 9581|| uriellua14@gmail uriellua.com

#### **EDUCATION**

Bachelor of Science in Electrical Engineering - Micro & Nano devices

 ${\bf Ingram\ School\ of\ Engineering\ -\ ABET\ Accredited\ Program}$ 

Texas State University-San Marcos, Texas

Minor in Applied Mathematics

# RELEVANT COURSEWORK

Building a Smart Grid, Waves & Heat, VHDL, Linear Control Systems, Data Analysis with Python, Microprocessors, Electromagnetism, Introduction to VLSI, Mixed & Analog signal design.

#### **TECHNICAL SKILLS**

Programing languages: Python, C++, Verilog HDL, Django

Spanish - Fluent

05/20

### EXPERIENCE

### Hardware test engineer

10/20 - Present

EASI LCC (Contractor Cisco Systems), Austin, TX

- · Wrote a CLI program in python that automated test report to excel and error analysis
- · Created detailed test plans/reports for router testing
- · Worked with product team members to root cause issues found during testing
- Represent Electrical Design Verification Testing (EDVT) group in cross-functional group with detailed status.
- Configured networking (TCP/IP), configured routers and traffic generators
- Testing, troubleshooted, and documented Hardware testing

#### Fiber Splicer

06/20 - 10/20

Renewable Electric Systems Americas, Harlingen, TX

- Spliced and tested fiber optic for windmill connections. Constructed splice cases. Prepared and maintained splicing records, schematics and diagrams.
- Performed work in accordance with industry standards. Read and followed design engineers' instructions and specifications. Wrote daily test reports.

#### Research Assistant: Autonomous Racing Platform Development.

01/20 - 06/20

Texas State University, Computer Science Department, San Marcos, TX

- Assembled hardware components like DC motors, motor controllers, motor braces, power supply and all other components for an autonomous car based on F1-tenth.
- Integrated sensors like IMU, Lidar and other modules in ROS through command line and implemented them for autonomous driving.

### **Network Installations Intern**

05/19-08/19

Apogee, Inc, Austin, TX

- Performed installation and installation commissioning, troubleshooting, and handling optical transmission systems.
- · Performed Fiber Optic testing, Ethernet, & wireless acceptance

### **PROJECTS**

# IEEE Robotics Competition - Texas State University

08/19-05/20

Project Manager - Senior Design Project

- Led and motivated a team of 5 to design and develop an autonomous robot capable of picking up and sorting different kinds of trash
- Developed SOW, Project Plan, Product Specification, and Final Design Review.
- Successfully integrated microprocessors, embedded controllers, power systems, image recognition and mechanical systems, while tracked key milestones and deliverable for every project's phases.

## Other Projects

- Created an automated verification system for a Verilog HDL 8 bit ripple carry adder (RCA8), and a test bench to verify the system.
- Wrote a guidebook for Numpy, Pandas, and Matplotlib basics and data analysis tools.
- 2nd Place Winner NSA Cybersecurity CTF Competition 11/19

