

## ARIEL A. ARZUAGA RIVERA

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**OBJECTIVE:** Contribute in a public or private company, where with my knowledge, skills and abilities I can commit to the achievement of organizational goals in the short and long term and in turn I can develop myself and have opportunities for growth both personally and professionally.

### EDUCATION

**Expected Graduation December 2026**

2023 – Present	B.S. Candidate, <b>Computer Engineering</b> , College of Engineering, University of Ana G. Méndez. Gurabo Campus.
2018-2023	Took some courses in <b>Mechanical Engineering</b> - College of Engineering, University of Puerto Rico, Mayaguez Campus.
2017-2018	High School: <b>Automotive Mechanic</b> , Escuela Vocacional Antonio Fernós Isern, San Lorenzo Puerto Rico

### SKILLS AND ABILITIES:

Advanced Computer Knowledge, Information Technology (IT), Bilingual, Troubleshooting Ability, Windows and Linux fluidity, Server Virtual Environments, Telecommunication and Networks knowledge, Electronics Soldering, Technical proficiency, Problem-solving, Communication skills, Adaptability, Teamwork, Attention to detail, Time management, Documentation, Organizational Knowledge.

### RESEARCH EXPERIENCE

**Researcher in Traffic Light Simulation Project** - Digital Logic Course **2023**  
University of Ana G. Mendez Gurabo Campus, PR.

- Used simulation software (Logisim) to simulate a 4 traffic Light system.
- Implemented using the fundamentals of binary numbers, Flip Flops, and sync clocks.

**Researcher in Audio Amplifier Project** - Electronics Laboratory Course **2023**  
University of Ana G. Mendez Gurabo Campus, PR.

- Used electronics fundamentals to assemble a type-A Audio Amplifier
- Used a breadboard to assemble a prototype and soldered some connections.
- Tested the prototype using Multimeters, Oscilloscopes, and Power Supplies.

**Research Electrical Engineering Assistant** - Solar Car Team: Batteries Division  
**2022- 2023**

University of Puerto Rico Mayagüez Campus, PR.

- Electric Vehicle Orion BMS configuration
- Lithium cell spot welding
- Fiberglass molding

*References Upon Request*

## **WORK EXPERIENCE**

**Security System Technician-** agreed or needed by the customer : **Present-since 2022**  
businesses offices and factories (e.g. Cintron Screens and Rentals, Gosén Iglesia de la Familia.)

- Installation and Configuration of wired and wireless security camera systems (Dahua, Hikvision, Amcrest) for outdoor and indoor locations using coaxial and PoE configurations.
- Installation and Configuration of NFC / RFID and pin-access door locks.

**Computer Technician-** agreed or needed by the customer: **Present - since 2019**  
businesses offices and factories (e.g. Cintrón Screens and Rentals, Cactus Management LLC).

- Desktop Personal Computer Building for workstation, entertainment and livestage production purposes (which includes : assembly of core hardware components such as CPU, RAM, GPU and respective Driver software for each unit.)
- Thermal tuning in the BIOS for individual computers according to the use case of the customer.
- Fixing and tuning of personal computers such as laptops and entertainment consoles: Hard Drive Disk cloning to Solid State Drive, Fan Replacements, additional laptop RAM installation, disassembly for debris and dust removal.
- Implementation of remote access tools such as TeamViewer , Chrome Remote Desktop and Parsec for remote access to the customers computers for advanced remote technical assistance.

**Network Technician -** agreed or needed by the customer: **Present - since 2018**  
businesses offices and factories (e.g. Cintron Screens and Rentals, CACTUS Management LLC).

- Installation of Access Points (AP) such as *Ubiquiti, TPLink*, for improvement of signal coverage and large number of network clients.
- Installation and Configuration of Power over Ethernet Point to Point Network Bridge (POE.PTP Bridge) for connecting the existing Internet Service Provider (ISP) network of one building to another wirelessly using PTP antennas.
- Installation of home-use WiFi Repeaters and WiFi mesh routers for signal coverage using WiFi analyzing software tools to ensure optimal dBm readings on the signal dead zones.
- IoT devices configuration.
- Implementation of Controlled DNS Servers such as *OpenDNS* for secure content filtering and protection capabilities on Local Area Networks (LAN) that are accessed by a large number of network clients.
- Static IP's configuration to avoid DHCP assignments to unwanted clients.
- Network control to ensure a cyber-secure environment, limiting unwanted access from intruders along with guiding clients to use cyber security measures.

**Engineering Assistant -** CACTUS Management LLC. **Present - since 2021**

- Daily assessment of Permits of different companies using the “Reglamento Conjunto de Puerto Rico 2020”
- Documentation of commercial signs for construction permits (PCOC) using "Single Business Portal" and Cadastral number.
- Preparation of special forms such as Request for Infrastructure Recommendation (SRI), Request for Environmental Recommendation (SRM), and Determination of Environmental Compliance (DEC).
- Installation of public project signs in assigned locations.
- Wireless network installation in the work office.
- Verifying and submitting construction permits (PCOC) for signs of commercial locations to the

***References Upon Request***

SBP for approval .

- Preparation of Engineer Certifications forms for validation of structural solidity of the assigned projects.

## **OTHER TECHNICAL SKILLS**

### **Automotive Mechanic**

- Took preparation for 3 years in the mechanic profession.
- Developed electromechanic problem solving abilities.
- Proficient in the use of power tools.

### **P3.91 Module LED Wall Screen**

- Installation, configuration and maintenance of a P3.91 Module LED *Novastar* Wall Screen.
- Replacement of defective LED modules using a vacuum gun.

## **SOFTWARE AND PROGRAMMING SKILLS**

*Operating Systems:* Windows, Linux (**Kali** - ethical hacking, Ubuntu, Debian, Fedora), Android.

*Office systems:* Word processors, Spreadsheets (Word, Excel), Slack, Emails, AdobeAcrobat.

*Software:* SolidWorks, Geogebra 5 Classic, MiniTab, Adams Simulation.

*Programming:* Spyder 4 , Visual Studio Code for Python and C++ (**Object Oriented Programming Courses, Data Structures.**)

*Network Software:* OpenDNS, Unifi Controller, WiFi Analyzer tools

## **CERTIFICATIONS AND PROFESSIONAL DEVELOPMENTS**

**In-Prep**

2023

**Google IT Support Professional Certificate**

Cybersecurity at National Security Agency (NSA): Critical Infrastructure and Systems - GHIDRA Workshop.

2022

“SolidWorks” Workshop brought by the Association of Mechanical Engineers Of UPRM (ASME).

## **LANGUAGES**

Spanish (first language); English (written and spoken)