Ricardo Islas Guerra

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Summary:

Electronics Engineer with hands-on experience in cybersecurity applications, SCADA systems, and automation in fast-paced environments. Proficient in Python, TypeScript, and Linux scripting, with a track record of optimizing system performance and ensuring compliance with industry standards. Adept at collaborating across diverse teams to develop data-driven solutions that enhance operational efficiency and security.

Education:

ITESM - B.S. in Electronics Engineer - GPA: 92/100	**Monterrey, MX. Aug 2020-Dec 2024**
ITMO University - Winter Exchange Program (Remote)	**St. Petersburg. RUS. Jan 2021**

Languages: English (Fluent), Spanish (native), French (Limited Working Proficiency)
Nationality: Spanish (EU Citizen) and Mexican (TN Visa Candidate for US Market)

Experience:

TESLA, Cybersecurity Applications Engineer Internship   **Palo Alto, USA. Sept 2023-Aug 2024**

- Developed a secure data diode solution for Battery Energy Storage Systems (BESS), ensuring compliance with NIS2 and NEVI guidelines, enabling the secure handling of Controlled Unclassified Information (CUI).
- Automated SCADA deployment processes (AVEVA historian setup, DNP3/MODBUS integration), reducing deployment time by 50%, enhancing operational security and resilience.
- Executed Controller Hardware-in-the-Loop (CHIL) security testing and end-to-end validation of proprietary software, strengthening ICS resilience to cyber threats.
- Authored comprehensive compliance documentation for NEVI guidelines (US) and NIS2 standards (EU), mapping country-specific adoption requirements to support Tesla Energy's expansion into European markets.

Skills: Linux, Networking, SCADA, Python, Golang, TypeScript, AVEVA, Documentation, Automation

QUALCOMM, Silicon Test Engineer Internship   **San Diego, USA. May 2023-Aug 2023**

- Designed and implemented a Pass/Fail Log Clustering System to identify systematic issues in premium-tier mobile ASICs using the Advantest 93000 Smartest platform.
- Analyzed structural test data to optimize processes, achieving a significant reduction in test time and improving test quality and correlation with functional tests.
- Developed a Python library to integrate Static Timing Analysis (STA) into Physical Testing and Evaluation (PTE), enhancing verification accuracy and efficiency.
- Designed and implemented test solutions for One-Time Programmable (OTP) memory on secure processors.

Skills: Circuit Analysis, Python, JavaScript, Data Analysis, Signal Processing, Automated Testing

FIRST Robotics, FTC and FRC Teams   **Chihuahua, MX. Aug 2018-May 2020**

- Co-founded the first community robotics team in Chihuahua, securing sponsorships totaling 20,000 USD to support STEM education for underserved communities.
- Led the design and development of four functional robots for forklift operations, incorporating encoders for telemetry, autonomous features, and remote control via LAN networks.
- Directed technical workshops and outreach programs, impacting over 100 students and mentoring 10 aspiring engineers for the next-generation robotics team.

Skills: SolidWorks, Robotics, Control Systems, Public Speaking, Team Leadership
Awards: Inspire award, Connect Award, Finalist Alliance, and twice Captain of Winning Alliance