



ROBERTO CERVANTES

Electronic Engineer
(Embedded Systems)

SUMMARY

Roberto S. Cervantes Martínez, 26 years old, Electronic Engineer. I like to take the initiative; I'm proactive and always open to acquiring new knowledge or adapting me to new work environments.

I seek to develop me professionally in areas of research, development, and management; related with **embedded software** and digital systems. I aspire to improve my current skills and be considered for positions with greater responsibility.

- +3 years developing **Software focused** on **Hardware**.
- +1 year running tests, validating, verifying, and **integrating software** in the automotive sector.
- Proficient in analytical and logical abilities to solve problems. Expertise in Project Management implementing traditional and **Agile Methodologies (SCRUM)**.
- Experience in multiple sectors projects, such as automotive, oil, quality, **home monitoring** (IoT) and industrial automation.
- Knowledge and use of **PEP 8** and **MISRA standards** for code written in **Python** and **C/C++** languages, respectively.
- Excellent communication skills.

CONTACT INFORMATION

Address:
Atizapán de Zaragoza, Edo. Méx.
(I'm Willing to relocate)

Contact Phone:
(+52) 55 35971880

E-mail
rs.cervantesm@gmail.com

LinkedIn: www.linkedin.com/in/rscm/

LANGUAGES

English: B2 (Upper-Intermediate)
Professional working proficiency

Spanish: Native

PERSONAL SKILLS

- | | |
|------------------------------------|------------------------|
| ▪ Teamwork | ▪ Leadership |
| ▪ Self-learning | ▪ Motivation |
| ▪ Organization | ▪ Initiative |
| ▪ Planning | ▪ Resilience |
| ▪ Analytical and conceptual skills | ▪ Attention to detail |
| | ▪ Results orientation. |

EDUCATION

Universidad Internacional de la Rioja

Master's Degree

Aug 2022 – Now

Program: Design and Management of Technological Projects.

Universidad Autónoma Metropolitana – Azcapotzalco

Bachelor's Degree

Sep 2015 – Nov 2020

Program: Electronic Engineering

Minor in Instrumentation and Control. 9.15 GPA. Professional License and Certificate obtained.

WORK EXPERIENCE

Tech Mahindra | Navistar International – Sr. Software Engineer

Sept 2022 – Now

- > Review and validation of messages, signals, and CAN/LIN databases. Execution of manual tests of electronic equipment (ECU's) and features of the Controls & Software department.
- > Update, review and creation of documentation and requirements in Polarion.
- > Creation, edition and mapping of signals and messages through RTDB Editor.
- > Track and query software versions through TortoiseSVN and Git.
- > Review, tracking and reporting of tickets in JIRA.

Capgemini Engineering | FORD México – Jr. Software Test Engineer

Apr 2022 – Sept 2022

Execution of manual and automated tests of electronic equipment (ECU'S), using Hardware in the Loop simulation, and test for features of the infotainment system associated with Ford SYNC 3. Report and follow-up of issues. Provide training.

U.A.M. Azcapotzalco – Research & Develop Assistant

Aug 2019 – Aug 2022

- > Development of projects and research, related to data acquisition, analysis and data/image processing using microcontrollers and simulation of systems, implementing IoT technologies and embedded software programming, for the Teletraffic and Optical Communications Laboratory & the Acoustic Analysis and Design Laboratory.
- > Provide advice on thesis projects and support with the teaching of subjects related with digital electronics, communications, and DSP in class.
- > C, C++ and Python programming.
- > Systems developing using platforms such as MATLAB, Simulink, LabVIEW, and Anaconda.

Servicios de Ingeniería y Control Avanzado – Laboratory Manager

May 2021 – Nov 2021

- > Person in charge of the Pressure and Temperature magnitudes laboratories. Ensure compliance with the program of Calibration, Verification and Maintenance. Assurance of the validity and quality of the results.
- > Updating of Control Charts of standard equipment, updating of field sheets, control of equipment assignments and regulations.
- > Support with logistics planning for field services. Preparation of requisitions, reporting, contact with suppliers and provide training.

PROFESIONAL SKILLS

Instrumentation Management

- Proficient in use of test equipment: oscilloscope, signal generator, multimeter, power source and spectrum analyzer.
- Skilled in use of Vector CAN/Lin Interface, Debug Board, RAD-Moon, ValueCAN and Test Bench.
- Proficient in the implementation of **different embedded systems** using **ARM, ESP**, or Arduino boards.

Software Skills

- Proficient in use of control and simulation software: LabVIEW, MATLAB, Simulink, Proteus.
- Proficient in the use of testing tools for CAN communication analysis: CANalyzer, CANoe and CANDdb++.
- Skilled in **electronic design software** (PCB): **Eagle**.
- Knowledge in **Linux** for **embedded applications**.
- Proficient in **embedded C, ANSI C, C, Phyton**, MATLAB, graphic, and **C++** coding.
- Skilled in different IDE tools (for develop and debug) such as: **MPLAB Harmony v3**, Arduino IDE, Visual Studio, Eclipse, and Anaconda.

Other Professional Skills

- **SCRUM Master** approved course.
- Knowledge in **IoT technologies**.
- Knowledge about **wired** and **wireless networking** (I2C, Ethernet, Wi-Fi, LoRa, Serial, CAN/LIN, TCP/IP, Modbus).
- Approved course in the ISTQB: Foundation Level.
- Knowledge about **HVAC comfort system**.
- Knowledge in the use of JIRA and ticket management.
- Skilled in the implementation of algorithms and data structures.
- Knowledge of ISO 9001 and ISO 17025 standards.

RELEVANT COURSES AND CERTIFICATIONS

2023 85 hrs.	Specialized Program Requirements Engineering: Secure Software Specifications.	University of Colorado, COURSERA
2023 120 hrs.	Specialized Program Self-Driving Cars	University of Toronto, COURSERA
2023 22 hrs.	Course Software Development Processes and Methodologies.	University of Minnesota, COURSERA
2023 100 hrs.	Diploma Soft Skills and Management Abilities.	UNIR México
2023 40 hrs.	Course workshop ARM microchip microcontroller programming.	Digital, Microchip
2023 30 hrs.	Course Automotive Embedded Systems & Applications	Uplatz Training, Udemy
2022 60 hrs.	Specialized Program Specialization in leadership and critical thinking: Leadership and organizational behavior, Critical thinking and Leadership oriented to human flourishing courses.	TEC de Monterrey, COURSERA
2022 12 hrs.	Course SCRUM Master course.	Agile Academy
2022 21 hrs.	Course MATLAB Fundamentals, Simulink Onramp, and Introduction to Statistical Methods.	MathWorks Inc.
2022 30 hrs.	Course Mastering Microcontroller and Embedded Driver Development	FastBit Embedded Brain Academy
2022 16 hrs.	Course ISTQB Foundation Level.	Ford México
2022 40 hrs.	Course workshop Configuration and use of the test bench. Testing execution. Create and track tickets in JIRA.	Ford México
2021 15 hrs.	Course LabVIEW Core I and LabVIEW Core II	Udemy, Carlos Javier Moreno Gómez