

RICARDO ARIEL LEIJA RODRÍGUEZ

ROBOTICS AND DIGITAL SYSTEMS ENGINEER

OVERALL OVERVIEW

I'm an engineer with a B.S. in Robotics and Digital Systems at the Monterrey Institute of Technology and Higher Education (ITESM) with strong interest in computer science and robotics related subjects. I've been learning and developing software for more than 4 years, mainly in Python, C++ and embedded C. Interested in aerospace, automotive, microchip manufacturing, robotics, tech industries.

CONTACT

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WORK EXPERIENCE

FuzzyFlags

Nuevo León, México
Sep 2023 - Present

Principal Engineer

- Managing the development and QA teams.
- Web apps development for businesses.
- Code reviewer of the whole company codebase.

TESLA

Palo Alto, California, USA
Oct 2022 - Aug 2023

Wireless Connectivity Software QA and Automation Intern

- Firmware QA/Validation for WiFi, Bluetooth and Cellular systems.
- Test automation framework stability & reliability improvements, test development and developed libraries for internal usage.
- Saved ~6,000 minutes of engineering hours with my developments in automation.

CEI

Remote
Jan 2023 - Jun 2023

Full-stack developer

- Fixed issues and made improvements front & backendwise on the organization's air quality website of the state of Nuevo León.
- Code reviewer of the team members PR's on the GitHub organization.

CREmx

Remote
Jun 2021 - Aug 2021

Frontend developer

- Redesigned several webpages and created one from scratch with the strategic guidance provided by the UI/UX designer using HTML and CSS.

Her-Sal

Coahuila, México
Mar 2019 - Jun 2019

Intern

- CNC programming with Mastercam X5 for precision machining of steel components.
- Learned how the company operates and does business.

Kumon

Coahuila, México
May 2017 - Aug 2017

Reviewer/teacher

- Reviewer for the students assignments.
- Teacher in the area of advanced levels of Mathematics.

ACADEMIC BACKGROUND

Monterrey Institute of Technology and Higher Education

Monterrey, Nuevo León, México

Don Bosco Technological Institute

Saltillo, Coahuila, México

Robotics and Digital Systems Engineer

August 2019 - December 2023

Mechatronics Technician

August 2016 - June 2019

TECHNICAL SKILLS

Operating systems

- Linux, WSL2, Windows XP, 10 & 11, Mac OS

Full stack development

- React 18, Typescript, Javascript, REST API development (expressJS, FastAPI), Bootstrap 5, HTML5, CSS3, MySQL

Tools

- Jira & Confluence, VSCode
- Git & GitHub
- Jenkins
- Tableau for data analysis

Skills

- Bash scripting
- Firmware Quality Assurance
- Data structures and algorithms
- 4+ years of Python experience for different applications
- Automation testing for software/hardware (with Pytest)
- ROS melodic
- STM32, NXP, Arduino & NodeMCU development boards
- C for embedded systems
- Communication protocols (CAN, I2C, SPI, UART etc.)
- C++ for general-purpose programming
- Matlab
- VHDL for FPGA's
- R for big data analysis
- Networking protocols

LANGUAGES

- Spanish -> Native
- English -> Proficient, C1

SOFT SKILLS

- Leadership for small & medium sized teams
- Patience and persistence
- Teamwork
- Fast learner
- Adaptability
- Problem solving
- Effective communication

Mechatronics related

- KUKA robotic arms manipulation basics (Course taken on May 2018)
- Software: Fusion 360, Autocad, Festo Fluid Simulator Hydraulics/Pneumatics and Proteus