

# Diego Mendes Moreno

*Software Engineer - Brazilian, 05/Jan/1991*

Vila Madalena - São Paulo / SP - Brazil (open to remote)

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## Profile

I have graduated as an Electronics Engineer and have an MBA in Software Engineering. I have experience developing industrial and web applications. My main skills are related to software development in general, following agile software engineering practices.

## Skills

**Programming** - C, Python

**Software Engineering** - Git, GitHub, Agile Methodology, Unity/MinUnit (tests), Linux

**Languages** - Portuguese native speaker - Fluent English - Advanced Spanish - Intermediate French

**Soft skills** - Continuous learning attitude, customer facing communication, team player

## Education

Impacta Tecnologia, São Paulo, SP (Brazil) - 2022

**MBA Software Engineering**

Centro Universitário da FEI, São Bernardo do Campo, SP (Brazil) - 2015

**Bachelor of Electronics Engineering**

University of Alabama at Birmingham, Birmingham, AL (USA) - 2013

**Bachelor of Electrical Engineering** (one-year Student Exchange Program)

- Science without Borders Program sponsored by CAPES (Brazilian government)

## Experience

Staff Field Applications Engineer | Renesas Electronics, São Paulo, SP (Brazil)

February 2022 - Present

- Provided support for embedded software development in C/C++
- Provided support on microcontroller architecture specifics (e.g. ARM Cortex-M RA and Synergy, RX, RL78, DA14531, DA16200 and RZ) on memory protection, boot modes, low-power, option setting memory, memory layout, etc.
- Provided support on microcontroller peripheral usage such as CAN, SPI, I2C, UART, Timers, etc.
- Testing, debugging and validation of software and hardware for board bring up and general working issues using bench tools (e.g. oscilloscope, logic analyser) and following circuit schematics and PCB layout drawings
- Provided support for use and configuration of integrated development environments (IDEs) and software debugging tools
- Delivered technical training sessions and product demos in customers and partners
- Part of a worldwide remote team with a hands-on customer facing role

Embedded Software Engineer | J.Assy, São Paulo, SP (Brazil)

February 2021 - February 2022

- Development of embedded software for precision planting (Agribusiness) products following software development best practices

- Added a CAN (Controller Area Network) API interface to our vacuum seed meter product to support a new kind of seed sensor (Technologies: C, CAN)
- Expanded the API interface of a wireless sensor gateway adding new features (Technologies: C, CAN)
- Developed a Proof of Concept (PoC) IoT project end-to-end of a wireless sensor gateway with Wi-Fi connectivity that monitors sensors through a Web App (Technologies: C, Wi-Fi, Web Server, RESTful API, Javascript, HTML, CSS)
- Developed a PC application with a GUI (Graphical User Interface) to monitor sensors in real time, shows important metrics and generates reports (Technologies: Python)
- Worked to add, refactor and integrate code into a large decentralized codebase
- Working with Agile practices and tools (Jira, Git, BitBucket, Confluence)
- Implemented a version control friendly Documentation practice with Markdown and PlantUML for product docs

## Field Applications Engineer | Karimex Componentes Eletrônicos, São Paulo, SP (Brazil)

May 2014 - February 2021

- Development of embedded software for 8-bit, 16-bit and 32-bit microcontrollers for various applications
- C and Python development for Embedded Linux
- Embedded Linux customization using the Yocto Project
- Development of graphical user interfaces (GUI) with Qt
- Active use of Git/GitHub for version control
- Use of IoT Web services (MQTT/HTTP) like Tago.io and AWS
- Experience with Wi-Fi (IEEE 802.11), Bluetooth Low Energy (BLE) and TFT control stacks
- Technical training on embedded systems
- Technical support on embedded systems and power electronics
- Development and delivery of product and prototype demonstrations
- Technical visits in customers
- Electronic component specification and cross reference for various applications

## Software Engineer Intern | Itaú Unibanco S.A., São Paulo, SP (Brazil)

October 2013 - May 2014

- Development of macros (VBA programming) for automation of spreadsheets

## Research Intern | Centro Universitário da FEI, São Bernardo do Campo, SP (Brazil)

October 2013 - January 2015

- Software and hardware development of an embedded frequency inverter for UPS (uninterruptible power supply) systems

## Research Intern | University of Alabama at Birmingham, Birmingham, AL (USA)

May 2013 - July 2013

- Experience using high-performance computing (HPC) to process diffusion tensor imaging (DTI) through Shell commands in a Linux/Unix based system