# Mauro Chiozzi

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São Paulo (SP) / Brazil (BR) CITY:

Available for international assignment

# PROFESSIONAL EXPERIENCE

APR/2021 - Currently

#### Quality Engineer at Embraer S/A - Botucatu, SP/BR

· USA Facilities Quality Supplier Interface

• Production Quality KPIs Manager & Process QA

Mechanical Assembly & Structure Problem-Solver (8D/RCCA)

• 2D/3D (Catia Viewer) technical drawing interpretation

Containment & Quality Gate Focal User

Product Design & Process improvement Interface

# Quality Engineer Intern at Embraer S/A - Botucatu, SP/BR

· Process Optimization & Automated task handler FEB/2019 - OCT/2020

• Non-Conformity Integrated System - Quality Gate Management

# Software Engineer Intern at SINFO 2 - Natal, RN/BR

IT organization focused on academic solutions development JAN/2017 - DEC/2018

• New features development using test-driven development (TDD).

#### ACADEMIC EDUCATION

Postgraduate Student in Mechanical Engineering

Thesis: Indoor Positioning System using Unknown AC-MF Beacons FEB/2021 - Currently Main subjects focused on Navigation Systems, E. Systems, Classic &

Analytic Mechanics (Dynamics)

Campinas State University (UNICAMP) - Campinas, SP/BR

**Introduction to Navigation Systems** 

Postgraduate Special Student in Mechanical Engineering FEB/2021 - JUN/2021

Polytechnic School of the University of São Paulo (Poli-USP) -

São Paulo, SP/BR

Drone Simulation and Control - MOOC Technical Course

FEB/2021 - MAY/2021 Quadcopter modeling, simulation and route planning using MatLab

Instituto Superior Técnico (IST/University of Lisbon) - Online

**Mechanical Engineering** 

Final Thesis: Multi-axis loadcell development for AeroDesign Analysis JUL/2016 - OCT/2020

Emphasis on Embedded Data Acquisition development, Thermodynamics Systems, Mechanical Systems, Machine Elements, Manufacturing Process

Federal University of Rio Grande do Norte (UFRN) - Natal, RN/BR

Science & Technology - Mechanical Technologist

JAN/2013 - JUL/2016 Emphasis on Mechanical Design and Computational methods

Federal University of Rio Grande do Norte (UFRN) - Natal, RN/BR

#### Embedded System Design & Data Acquisition (DAQ) Manager

- Evaluate requirements, functional & non-functional features
- Evaluate and develop new sensors and actuators

MAY/2018 - OCT/2019

- Develop/improve, prototype, test, and validate solutions using SolidWorks, Ansys, and Proteus Suit
- SMD components soldering. Up to 0603 (1.6 x 0.8 mm)

Car-Kará Aerodesign SAE Team - UFRN

### Team Co-Leader and Embedded System Design & DAQ Manager

- · Develop new team-members
- · Promote Team synergy spirit
- Product development life-cycle planning

MAY/2015 - MAY/2018

- Evaluate overall design integration
- Develop/improve, prototype, test, and validate solutions using SolidWorks, Ansys, and Proteus Suit
- Use of Brazilian Technical Standards to design and manufacture parts (NBR 17006, 17068, 6409)

Car-Kará Baja SAE Team - UFRN

Jul/2017 - Nov/2017

**Technical Committee Volunter** 

IEEE Student-branch - Bahia Section / R9 - UFRN

Scientific Undergraduate Researcher

AUG/2016 - AUG/2017

"Modalities Concurrency: Fundamentals and Applications in bioinformatics and Service-Oriented Computing" - PIB12828-2016

Science & Technology School - UFRN

**Undergraduate Teacher Assistant** 

JAN/2014 - AUG/2016

"Programming Logic" and "Introduction to Programming" courses

Science & Technology School - UFRN

Teacher

FEB/2014 - MAY/2015

"Introduction to Embedded Systems: Arduino Development" Mechatronics Introduction Group (GIM) Volunteer - UFRN

# COMPUTER SKILLS<sup>1</sup>

**ENGINEERING:** 

**PROGRAMMING:** 

SolidWorks , Proteus Isis (Circuit Schematic) & Ares (PCB),

SciLab/XCos, MatLab/Simulink, Ansys Workbench (static deformation and thermal simulation), SketchUp, Geogebra,

RapidHarness, Catia V5 (part & assembly), Catia Viewer,

AutoCAD, VRML, Minitab

OOP, Python **☑** , Django + DRF **☑** , Flask, Celery, Selenium,

Pandas, SQL, ReactJS, JavaScript, HTML ☑, CSS ☑, LaTex, Java, Thymeleaf, Arduino FrameWork, C/C++ ☑, Git ☑, FreeRTOS, VisualBasic, VBA (Excel), Access, SAP Scripting, STM IDECube

OFFICE: Power BI, Excel , Word, PowerPoint, MS Project, Slack, Trello,

Lira, Confluence, ERP SAP, ERP MES

# **LANGUAGES**

ENGLISH: Fluent ITALIAN: Beginner

PORTUGUESE: Mother Language SPANISH: Intermediary

# PROJECTS PORTFOLIO

To check out more projects developed using CAx Tools (SolidWorks, Catia, Proteus, etc) and their details, navigate to portfolio website maurochiozzi.qithub.io/#/projects

- Multi-axis loadcell for aerodynamic forces acquisition combined forces acquisition at up to 10 Hz, 2019;
- Embedded System for radio-controlled airplane acquisition rate of 20 Hz in a small  $\mu$ C (15 params), 2018;
- Real-Time data viewer application (Java Swing) for telemetry systems refresh rate up to 100 Hz, 2017;
- Carbon fiber steering wheel with integrated dashboard outstanding design  $\mathcal{E}$  performance, 2017;
- Distributed Embedded System for off-road vehicle ECUs scalability due to CAN Network, 2017;
- Centralized Embedded System for off-road vehicle reliable data acquisition system with a small  $\mu C$ , 2016;

# PARTICIPATION IN SAE<sup>2</sup> COMPETITIONS

"SAE International's Collegiate Design Series (CDS) competitions take students beyond textbook theory by enabling them to design, build, and test the performance of a real vehicle and then compete with other students from around the globe in exciting and intense competitions." - SAE International

2018 International: Baja SAE Kansas Phase -  $10^{th}$  Overall National:  $20^{th}$  Aerodesign SAE Brasil -  $2^{nd}$  Overall

National: 23<sup>rd</sup> Baja SAE Brazil - 5<sup>th</sup> Overall

Regional:  $13^{th}$  Northeast-Phase Baja SAE -  $14^{th}$  Overall

2016 National:  $22^{nd}$  Baja SAE Brazil -  $9^{th}$  Overall

<sup>&</sup>lt;sup>2</sup>Society of Automotive Engineers