

ANDERSON LUIZ DIAS

ACADEMIC EXPERIENCE

INTERNSHIP, **LABORATORY OF VIBRATIONS - LABVIB**

Fortaleza, Brazil - 2019 - 2020

I was awarded a scholarship in LabVib and conducted the research about brake squeal. In the LabVib team I engaged the study about squeal issues in automotive drum brakes.

- Publishing four papers about brake squeal using sensitivity analysis and design of experiment (DOE) to check its correlation with brake material parameters.
- Modelling of three drum brakes based in real models by Ansys Design Modeler that afterwards were used for static structural and modal analysis.
- Lecturer of Brake Squeal Research in academic lectures.
- Designing and building of the stick-slip experimental test bench for brake materials analysis through Catia V5 software.

INTERNSHIP, **INTERNAL COMBUSTION ENGINE LABORATORY - LMCI**

Fortaleza, Brazil - 2018 - 2019

I held a internship position in LMCI and worked on engine bench test and combustion simulations.

- Performing ICE test using a test rig controlled by LabView software.

PROFESSIONAL

F1 SCHOLARSHIP INTERN, **SCUDERIA ALPHA TAURI**

Faenza, 10/2023

As part of the F1 Scholarship program, I assumed a position at Scuderia Alpha Tauri.

- Support the development of statistics/probability of previous F1 races to help strategy decision process (database development and pre-event);
- Post-event database and report support for strategy using Power BI;
- Explore a solution to build a smart sporting regulation portal (using Ai to quickly answer questions).

TRAINEE ENGINEER, **PORSCHE CUP BRAZIL**

São Paulo, Brazil - 2019

Trainee of racing engineer during the São Paulo 500 Km Endurance race. This activity was part of The Motorsport Engineering, The Data Acquisition and Tire Specialization courses by Jorge Segers.

- Perform data analysis of outings and discuss with the data engineer in charge;
- Propose race strategies with the data engineer;
- Discuss possible car setups after the data analysis;
- Monitor the tire pressure during the event.

INTERNSHIP-QUALITY INSPECTOR, **FORD MOTOR COMPANY BRAZIL LTDA**

Horizonte, Brazil - 2011 - 2014

As Incoming quality internship I support every car part supplier of the plant reporting quality issues. During this period I became a Six Sigma Green Belt verified and took the battery failure project.

Detailed achievements:

- Team leader in a RTM Cost Reduction project using Ford Global 8D methodology;
- Team leader in a Battery Scrap Reduction Six Sigma Green Belt project;
- Team leader in a Wheel Misalignment Correction Six Sigma Green Belt project;
- Development statistical analysis using Minitab for Battery Scrap Reduction project.

TIER 2 MECHANIC, **SATA GROUND HANDLING SERVICES**

Fortaleza, Brazil - 2010 - 2011

Corrective and predictive maintenance of heavy duty vehicles.

- Translating Pallet Loader Maintenance Manuals;
- Planning periodic maintenance of tractors, loaders, trucks and movable belts.



PRESENTATION

Its career goal is to work in motorsport environment. Developed and built many skills inside the automotive industry during the last 15 years. Works fast, learns fast, mainly in practical activities with software, hand calculations, writing technical reports and working in the field. All knowledge, self-motivation and discipline acquired allows to work in several areas of a racing team as quality area, mechanical design, vehicle dynamics, and aerodynamics

CONTACT

+39 327 685 67522

eng.adias.21@gmail.com

<https://carrosinfoco.com.br/>

Piazzale Daniele Bertozzi, 1 – 43125

– Parma

LANGUAGES

- English - Fluent
- Italian - Fluent

COMPUTER SKILLS

Simulation: Ansys, Adam's Car.

Design: Catia V5, Ansys Design

Modeler, 3D Experience.

Data analysis: Pi Toolbox.

Mathematics: Matlab, Power BI.

Document edit: Office, Latex.

APRENTICE-MECHANIC AUX. **FAZAUTO - VOLKSWAGEN DEALERSHIP**
Fortaleza, Brazil - 2009 - 2010
Assistance to senior mechanics in Technical assistance of VW vehicles.

INTERNSHIP **JANGADA VEÍCULOS - RENAULT DEALERSHIP**
Fortaleza, 2007 - 2008

Stock maintenance, inventory and shop attendance.

- Planning the organization of part inventory;
- Management of the use of Renault CLIP Scanner and special tools for the shop.

PUBLICATIONS

- [1]** Anderson Luiz Dias, Rômulo do Nascimento Rodrigues, Roberto de Araújo Bezerra, Pierre Lamary, and Matheus Henrique Pires Miranda. Light duty automotive drum brake squeal analysis using the finite element method. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Material Engineering Science, 2021.
- [2]** Anderson Luiz Dias, Rômulo do Nascimento Rodrigues, Roberto de Araújo Bezerra, Pierre Lamary, and Matheus Henrique Pires Miranda. Light duty automotive duplex drum brake squeal analysis using the finite element method. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2021.
- [3]** Anderson Luiz Dias, Rômulo do Nascimento Rodrigues, Roberto de Araújo Bezerra, Pierre Lamary, and Matheus Henrique Pires Miranda. Automotive Simplex and Duplex Drum Brake Squeal Analysis Using The Finite Element Method. Noise Vibration Worldwide, 2022.
- [4]** Anderson Luiz Dias, Rômulo do Nascimento Rodrigues, Roberto de Araújo Bezerra, Pierre Lamary, and Matheus Henrique Pires Miranda. Heavy duty automotive drum brake squeal analysis using the finite element method. Archive of Applied Mechanics, 2022.