

## **European curriculum vitae**

# EUROPEAN CURRICULUM VITAE FORMAT



## PERSONAL INFORMATION

Name  
Gender

**MARQUES, JULIAN MARCELL ENZVEILER**  
Male

## WORK EXPERIENCE

- Dates  
OCT/2008 - Nov/2017
- Name and address of employer  
**Ciber Equipamentos Rodoviários** | 77, Senhor do Bom Fim street, 91140-380, Porto Alegre, Rio Grande do Sul, Brazil
- Type of business or sector  
A company member of Wirtgen Group specialized in developing and manufacturing equipment for building, maintaining, and repairing roads.
- Occupation or position held  
Mechanical Engineer
- Main activities and responsibilities  
Research and development of complex structures. Structural analysis using Finite Element Method – FEM (numerical simulation) and analytical calculations.

## EDUCATION AND TRAINING

- Dates  
NOV/2017 – PRESENT
- Title of qualification awarded  
PhD Student in Engineering Science
- Name and type of organization providing education and training  
Università degli Studi di Ferrara (University of Ferrara), Ferrara, Italy
- Dates  
MAR/2013 – APR/2017
- Title of qualification awarded  
Master's degree in Mechanical Engineering
- Thesis title  
"A Comparison among Methodologies for Fatigue Life Calculation in Time and Frequency Domain with Application in the Dynamic Simulation of Semi-Trailers".
- Principal subjects/occupational skills covered  
Finite Elements, Dynamic Simulation, Fatigue Life in Time and Frequency Domain, Plate and Beam Elements
- Name and type of organization providing education and training  
Universidade Federal do Rio Grande do Sul, UFRGS (Federal University of Rio Grande do Sul), Brazil.
- Level in national classification  
Master's degree
- Dates  
MAR/2004 – DEZ/2012
- Title of qualification awarded  
Bachelor degree in Mechanical Industrial Engineering
- Thesis title  
"Numerical Evaluation of the Pre-collector of a Hot Mix Asphalt Plant".
- Principal subjects/occupational skills covered  
Asphalt Plant, Swirl, Numerical Simulation, Total Pressure
- Name and type of organization providing education and training  
Universidade Feevale (Feevale University), Brazil.
- Level in national classification  
Bachelor degree
- Dates  
2000 – 2004
- Title of qualification awarded  
Precision Mechanic Technician
- Name and type of organization providing education and training  
Escola Técnica SENAI Plínio Gilberto Kroeff (Rio Grande do Sul, Brazil).
- Level in national classification  
High School degree

**PERSONAL SKILLS  
AND COMPETENCES**

MOTHER TONGUE

**PORTUGUESE**

OTHER LANGUAGES

Self-assessment

*European level (\*)*

**English**

**German**

**Italian**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Independent User	B2	Independent User	B2	Independent User	B2	Independent User	B2	Independent User
A1	Basic User	A1	Basic User	A1	Basic User	A1	Basic User	A1	Basic User
A1	Basic User	A1	Basic User	A1	Basic User	A1	Basic User	A1	Basic User

(\*) *Common European Framework of Reference for Languages*

ORGANIZATIONAL SKILLS  
AND COMPETENCES

Self-sufficient, committed and reliable. I am good at prioritizing, organizing and planning my work effectively what leads me to have excellent time and resources management. It benefits me to accomplish deadlines and work under pressure. Strong interest in absorbing new knowledge helps me not only to have critical thinking and the ability to understand problems, but also the power to propose new ideas and solutions to solve engineering problems (by using software, equipment, technics and labs) and project systems (being creative and innovative).

TECHNICAL SKILLS  
AND COMPETENCES

My work experience and my final thesis (Master's degree) gave the opportunity to focus on methodologies for fatigue life calculation in vehicles dynamic simulation. Because of this, I got some experience in modal, harmonic, transient and spectral analysis using numerical (Finite Element Method) and analytical methods to calculate them. Since then, I have developed excellent abilities in CAD 3D software, designing mechanical components and large assemblies. My experience taught me to solve problems in dynamic simulations of complex structures (e.g. chassis of semi-trailers). Because of this, I have also acquired a huge amount of knowledge in road excitations (random, stationary, ergodic and Gaussian processes).

COMPUTER SKILLS  
AND COMPETENCES

Operating systems: Windows.

Programming languages: Matlab.

Other software: Microsoft Office (Word, Excel, Powerpoint), Solidworks, NX essentials and intermediate, Sheet Metal Design NX, Teamcenter Integration for NX Users, Teamcenter Schedule Manager NX, Large Assembly Management NX, Solid Edge (fundamentals), Inventor (advanced), ANSYS SpaceClaim (Preparation of Geometries), ANSYS Workbench and Multiphysics, Latex.

PUBLICATIONS

**Conference papers**

1. Benasciutti, D., Marques, J. M. E., (2019). "An efficient procedure to speed up critical plane search in multiaxial fatigue: Application to the Carpinteri-Spagnoli spectral criterion". 12th International Conference on Multiaxial Fatigue and Fracture (ICMFF12), Bordeaux, France
2. Marques, J. M. E. and Marczak, R. J. (2017) "A Comparison among Methodologies for Fatigue Life Calculation in Time and Frequency Domain with Application in the Dynamic Simulation". In: XIII Congresso Ibero-Americano de Engenharia Mecânica (CIBEM), Lisboa, Portugal.
3. Marques, J. M. E., Moura, A. B. D., and Braun, A. (2013) "Numerical Evaluation of the Pre-Collector of a Hot Mix Asphalt Plant". In: 22nd International Congress of Mechanical Engineering (COBEM), Ribeirão Preto, Brazil, pp. 6382-6392.

**5<sup>st</sup> July, 2019**