

# JÉDERSON DA SILVA

**Nationality:** Brazilian.  
**Date of Birth:** October / 28<sup>th</sup> / 1990  
**Marital Status:** Married.  
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## Education:

**2008 – 2012** Federal Technological University of Paraná (UTFPR).  
Degree: Bachelor in Mechanical Engineering.

**2013 – 2014** Federal University of Paraná.  
Master's Degree - Mechanical Engineering  
Emphasis on Mechanical Projects / Mechanics of Solids (Finite Element Method).

**2015- actual** Federal University of Paraná.  
Doctorate's Degree - Mechanical Engineering  
Emphasis on Mechanical Projects / Mechanics of Solids (Finite Element Method).

## Work Experience:

**Date (October, 2015- Actual):** Federal Technological University of Paraná (UTFPR)  
Professor  
Mechanical Engineering Department, 40 hours per week.  
Disciplines: Mechanics of Solids and Dinamic.

**Date (August, 2013 – February, 2014):** Federal University of Paraná  
Substitute teacher - Mechanical Engineering Department, 40 hours per week.  
Disciplines: Mechanics of Solids and Static.

**Date (January, 2012 – August, 2012):** Atlas Eletrodomésticos  
Internship in Process Engineering.

## Main Activities:

- Process Control and Quality Control – Standard deviation, error proofing, optimization through statistics analysis, tasks and job descriptions aiming time and cost effectiveness.
- Monitoring the implementation of new progressive Stamping Line – Project budgeting, definitions of optimal layout, transport, moving and storage options of stamped parts.
- Dimensioning, budget, selection and monitoring of ventilation systems and compressed air system.

**Date (January, 2011 – March, 2011):** Atlas Eletrodomésticos

Internship in Process Engineering.

Main Activities:

- Monitoring Production Processes.
- Optimization of Factory Layout.

**ACADEMIC EXPERIENCE:**

**February 2013 – 2014**

Research Project - Structural topology optimization using Finite Element Method.  
This work has as main goal of obtaining an optimal topology for a mechanical component, aiming the lowest possible mass with tensions restriction.

**2012**

Completion of position paper entitled **Project and Installation of Flamotubular Boiler in UTFPR.**

Area: Thermodynamics and heat transfer.

**2010 – 2011**

Extension Course in Automotive Maintenance - Federal Technological University of Paraná - Fellow of the Araucaria Foundation and Support of Scientific and Technological Development.

This work had as main goal the development of qualified professionals in the field of automotive maintenance.

**FULL PAPERS PUBLISHED IN JOURNALS:**

BERTONI, JEAN CLEBER; PARIONA, MOISÉS MEZA ; BRINATTI, ANDRÉ MAURÍCIO ; TELEGINSKI, VIVIANE ; SILVA, JEDERSON . Qualitative Identification of phases of Al-1.5 wt.% Fe treated by laser surface remelting by means of grazing incidence X-ray diffraction. *Matéria (UFRJ)* <sup>JCR</sup>, v. 20, p. 882-897, 2015.

**COMPLETE WORKS PUBLISHED IN PROCEEDINGS OF CONFERENCES:**

**SILVA, J.**; GUBAUA, J. E. ; DICATI, G. W. O. ; PEREIRA, J. T. . Analysis of different methods to prevent the formation of similar checkerboard pattern at a two-dimensional analysis bone remodeling. In: CILAMCE, 2015, Rio de Janeiro. Congresso Ibérico Latino Americano de Métodos Computacionais em Engenharia, 2015.

DICATI, G. W. O. ; GUBAUA, J. E. ; **SILVA, J.** ; PEREIRA, J. T. . Analysis of bone remodeling via Stanford anisotropic model two- and three-dimensional models of the human fêmur. In: CILAMCE, 2015, Rio de Janeiro. Congresso Ibérico Latino Americano de Métodos Computacionais em Engenharia, 2015.

**SILVA, J.**; GUBAUA, J. E. ; DICATI, G. W. O. ; PEREIRA, J. T. . Analysis of bone remodeling using H-Adaptivity in a two-dimensional model of a human fêmur. In: V SMNC, 2015, Curitiba. V Simpósio de Métodos Numéricos Computacionais, 2015.

**SILVA, J.**; SILVA, F. E. C. ; PEREIRA, J. T. ; GONCALVES, J. C. L. . A discussion of h-adaptivity in the Finite Element Method applied to the beam problem of Euler-Bernoulli. In: V

SMNC, 2015, Curitiba. V Simpósio de Métodos Numéricos, 2015.

**SILVA, JÉDERSON DA**; SILVA, FRANCIELLY ELIZABETH DE CASTRO ; PEREIRA, JUCÉLIO TOMÁS ; GONÇALVES, JOÃO DO CARMO LOPES . ANALYSIS OF ERROR ESTIMATORS DIFFERENT SUBSEQUENTLY APPLIED TO PROBLEMS USING TWO-DIMENSIONAL REFINING H-ADAPTIVE. In: Congresso Nacional de Matemática Aplicada à Indústria, 2015, Caldas Novas. Anais do Congresso Nacional de Matemática Aplicada à Indústria. São Paulo: Editora Edgard Blücher. p. 695.

PORTOLLAN, C. A. ; LAFAY, J. S. ; KOLZER, J. F. ; **SILVA, J.** ; SLONGO, B. L. Increased Distribution Load Factor Restricting the Use of Electric Showers. In: Congreso Internacional de Distribucion electrica (CIDEL), 2010, Buenos Aires. CIDEL ARGENTINA, 2010.

### **ABSTRACTS PUBLISHED IN PROCEEDINGS OF CONFERENCES:**

**SILVA, J .**; GUBAUA, J.E.; DICATI, G. W. O.; PEREIRA, J. T.. Smoothing spatial field density for inhibition similar pattern checkerboard in the process of bone remodeling .. In: XVI Brazilian Congress of Biomechanics, 2015, Florianópolis. XVI Brazilian Congress of Biomechanics, 2015.

**SILVA, J .**; SILVA, F. E. C.; PEREIRA, J. T.. Analysis of different error estimators retrospectively applied to two-dimensional problems using H-Adaptive refining. In: XXII Day Jóvenes Researchers, 2014 Valparaiso. XXII Day of Jóvenes Researchers AUGM.

### **SKILLS**

English:	Advanced Level.
AutoCAD and SolidWorks:	Intermediate Level.
Finite Element Method:	Advanced Level.
Computer Skills:	Office (Word, Excel and Power Point).