### Jose dos Reis Vieira de Moura Jr

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# **Experience**

Uberlandia Polytechnic Institute August 2006 – Today

Uberlandia – MG – Brazil

Teacher of several disciplines in each semester, varying among *Transports and Logistics*, *Design and Analysis of Agro Industrial Plants* (Agribusiness - 2006 only), *Introduction to Engineering, Software Engineering, Dynamics, Applied Artificial Intelligence, Principles of Control and Servomechanisms, Applied Computation for Engineers, Robotics* and *Data Acquisition Systems* (Electrical and Automation & Control Engineerings).

Proativa Quality Planning and Product Developing Inc.

Belo Horizonte (Office) – MG – Brazil

December 2004 – Today

Consultant

Subjects: QFD, Taguchi Methods, Fuzzy and Neural Networks, Quality Tools, Statistical Meta-modeling, Process Statistical Control, TRIZ (Altshuller Methods). Places: Belgo Arcelor Mittal Brasil S.A. (Arcelor Mittal Group), Samarco Mineração S.A. (Vale and BHP Billiton Groups) – Brazil and Acindar Grupo ArcelorMittal (Arcelor Mittal Group) – Argentina.

Federal University of Uberlandia

Uberlandia – MG – Brazil

August 2004 – August 2005

Teaching Assistant of Experimental Physics (Engineerings)

Subjects: Experimental Electrostatics, Electrodynamics and Electromagnetism

Meta Junior Consulting Company – UFU

Uberlandia January 2001 - January 2002

Assistant engineer consultant – Mechanical components designer to a new machine for the Tobacco Company "Souza Cruz" (British American Tobacco Group).

Specialization Course in Computer Networks – UFU Uberlandia January 2000 - January 2001

Webmaster – HTML, PHP

Multimedia and Systems Apicem Ltd

Uberlandia January 2000 - December 2000

Web site developer and programmer – HTML, PHP, Java2, MySQL

Dynamics of Mechanical Systems Laboratory – UFU Uberlandia January 2000 - January 2001

Student assistant researcher – ANSYS, Catia, C++, Matlab, Optimization Methods

Robotics and Artificial Intelligence Group – UNIT Uberlandia January 2000 - January 2001

Student assistant researcher – Java, C++, Matlab, Neural Networks, Fuzzy Logic, Image

**Processing Techniques** 

Automation and Robotics Laboratory – UFU

Uberlandia January 1999 - January 2000

Student assistant researcher – circuit designer and PC drive programming

Fluid Dynamic Laboratory – UFU

Uberlandia January 1998 - January 1999

Student assistant researcher – Matlab, C++

## **Education**

Federal University of Uberlandia – UFU

Uberlandia Today

Posdoc - Mechanical Engineering

"Structural Health Monitoring for Aircrafts"

Subjects: Statistical and AI Meta-Models, Smart Structures, Structural Health

Monitoring on Aircraft Structures, Software Development

Partners: FINEP-UFU-UNESP-EMBRAER.

Head: Valder Steffen Jr.

Federal University of Uberlandia – UFU

Uberlandia February 2008

PhD - Mechanical Engineering

"A Contribution to Structural Health Monitoring Systems Applied to Aeronautical and Space Structures"

Subjects: Statistical and AI Meta-Models, Smart Structures, Health Monitoring on Aircraft and Space Structures

Technical Visits and Partners: Two technical visits at the Virginia Polytechnic Institute and State University (Virginia Tech) in Blacksburg-VA-USA to develop experimental tests. February 2005 (two helicopter blades and f15 rib structure) and January 2006 (corrosion in high altitudes and two satellites structures). Two technical visits at the EMBRAER in Sao Jose dos Campos-SP-Brazil (some aircraft structures).

Advisor: Valder Steffen Jr.

Federal University of Uberlandia – UFU

Uberlandia April 2004

Master of Science - Mechanical Engineering

"Damage Detection Methods in Aeronautic Structures by Using Meta-Modeling Associated with Impedance Techniques and Smart Structures"

Subjects: Statistical and AI Meta-Models, Smart Structures and Health Monitoring on Aircraft Structures

*Partner:* CTA (Airspace Technical Center – Brazilian Air Force). The work is done in a vertical fin of a UAV supplied by the CTA.

Federal University of Uberlandia – UFU Uberlandia February 2004 Master of Science - Computer Science

"Models of Public Key Cryptography in Clean Functional Language and Influences of the Quantum Computation"

Subjects: Public Key Cryptography, Clean Functional Language and Quantum Information

Federal University of Uberlandia – UFU
Uberlandia April 2002

Bachelor of Science - Mechanical Engineering

Centro Universitário do Triangulo – UNIT Uberlandia January 2002 Bachelor of Science - Computer Science

More than 70 technical papers presented in national and international conferences.

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### Objective

To obtain a position as a Mechanical Engineer or Computer Scientist related to my subjects of interest.

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#### Skills

- · Ability to manage multiple priorities in a fast-paced environment
- · Demonstrated teamwork skills
- Demonstrated ability to prioritize and act with a sense of urgency
- · Strong organizational and analytical skills
- · Independent problem solving and effective decision making abilities
- Detail oriented

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# Languages

- · Portuguese (native)
- English (fluent)
- · French (intermediate)
- · German (intermediate)
- · Spanish (basic)

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# Hobbies

Interests include violin, acoustic guitar and clarinet, paintings, poetry, kickboxing (black belt first Dan since 2000, associated at World Association of Kickboxing Organizations – WAKO), wines and cultures in general.