Gustavo O. Violato

Personal Data

Place and Date of Birth:	Curitiba, Brazil | 18 April 1986
Address:	R. Manoel Correia de Freitas - 1300, Curitiba/PR, Brazil
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Nationality:	Brazilian & Italian

Professional Goal

Become a reference professional in wind engineering by contributing to the application and development of innovative, world-class products. Work in a challenging and rewarding environment as part of an expert team with freedom to discuss and exchange ideas.

Work Experience

Current
Aug 2014

Wind Turbine Loads Engineer at WEG Equipamentos Elétricos S.A., Jaraguá do Sul-Brazil
Wind turbine development and testing & Wind turbine load calculations
Loads calculations using FAST (NREL) both for designing new products as well as for simulations of existing platforms (support for mechanical load assessment). **Wind turbine development**: constant support and interaction with other teams during design iterations. **Standards and Guidelines**: Experience with IEC 61400-1; IEC 61400-12-1; IEC 61400-13 standards and GL-2010 guidelines. **Support for certification** of a multi-megawatt platform, specially type testing preparations and power curve data analysis. Turbine field data analysis for power curve performance assessment. **Technical evaluation of commercial proposals** for turbine certification and testing services. **Software development of in house tools** for load simulations, from model preparation and validation through simulation and time-series post processing.

Jun 2014
Dec 2010

Engineer at Camargo-Schubert Engenheiros Associados, Curitiba-Brazil
Wind Engineering & Wind Resource Assessment
Wind Monitoring: planning of measurement campaigns; on-site equipment commissioning; analysis and certification of measured wind data. **Wind resource Assessment**: micro-scale flow modeling; wind farm layout optimization and energy production calculation; uncertainty in the wind resource and wind farm production reports. **Lidar systems**: planning of measurement campaigns; field commissioning; data analysis. **Preliminary aerodynamic design** of wind turbine blades. **Software development** for wind data collection, handling and analysis coupled with automatic report generation. General optimization of internal processes and work-flows. **Preparation of technical-commercial proposals** for certification of wind measurement campaigns, wind farm energy production and wind engineering services in general.

Jun 2009
Aug 2008

Intern at URI/DRONES - École Nationale de L'Aviation Civile (ENAC), Toulouse-France
Unmanned Aircraft Vehicles Simulation and Controller Development
Assisted in **control design, physical modeling and simulation** environments for research and development of UAVs. Developed a functional UAV system simulation environment. Designed and built a test bench for Micro-UAVs dynamics identification. Acquired in field experience with flight tests.

Education

Dec 2012
Jan 2010

Master of Science in Aircraft Control, **Instituto Tecnológico de Aeronáutica (ITA)**
São José dos Campos-Brazil, Major: Adaptive Control, Advisor: Prof. Pedro Paglione
Thesis: "Nonlinear, Adaptive Control System for Payload Extraction Operations"

Dec 2009
Feb 2004

Bachelor's Degree in Aeronautical Engineering, **Instituto Tecnológico de Aeronáutica**
Thesis: "Review of Nonlinear Aircraft-Control Techniques" | Advisor: Pedro Paglione
Extra Curricular Courses on High Speed Aerodynamics, Astronautics and Celestial Mechanics

Jul 2008
Jan 2008

Exchange semester at **École Nationale de L'Aviation Civile (ENAC)**. Toulouse - France

Dec 2003

Graduated high-school at **Military School of Curitiba**

Publications, Accomplishments & Awards

2013 Atlas Eólico: Bahia. Elaborado por Camargo-Schubert Engenheiros Associados [et al.] - Curitiba. SECTI, SEINFRA, CIMATEC/SENAI - Salvador, 2013. ISBN 978-85-67342-00-9. (Bahia Wind Atlas)

2013 **G O Violato** and P Paglione. Nonlinear, adaptive control system for payload extraction operations. 22nd International Congress of Mechanical Engineering (COBEM 2013) November 3-7, 2013, Ribeirão Preto, SP, Brazil

2011 J N Dias, **G O Violato**, and C A Martins. Dynamic model of a two-stroke glow engine from experimental data. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering December 2012 226: 1502-1512, first published on December 5, 2011

2009 Best bachelor thesis from the Aeronautic Engineering Division - Instituto Tecnológico de Aeronáutica (ITA)

2007 Captain of SAE Aero Design Instituto Tecnológico de Aeronáutica team

Languages

Portuguese:	Read, Write, Speak (Native Speaker)	English:	Read, Write, Speak (Fluent)
French:	Read, Speak (Advanced)	Spanish:	Basic knowledge

Computer & Programming

Programming Languages:	Python, C, Fortran
Scientific Programming:	Matlab, Scilab, NCL. Experience with NetCDF and HDF5 data formats.
Markup Languages:	HTML, XML, LaTeX
Computer usage:	Linux, Basic CAD & Finite-Element Modeling knowledge, MS Office Tools

General

Worldwide mobility, traveling availability, will to participate in field campaigns. More information on my personal website: viola.to