Short Curriculum Vitae

EdilsonAlexandre Camargo is researcher at the Aeronautical Institute and Space, an institution that belongs to the Department of Aerospace Science and Technology, in São José dos Campos, Brazil, where has been developing research on the application of Operational Modal Analysis Structures and Aeronautics and Systems space. He is also a professor at the Faculty of Technology Eniac, teaching subjects related to Electronic Engineering and advising graduate students on projects related to the area of industrial automation. In its scientific production, published 7 papers in journals and 24 papers in conference proceedings and has 4 items of technical production. Participated in 10 events abroad and 10 in Brazil, held 48 guidelines in the areas of Electrical Engineering, Mechanical Engineering and Geosciences.His main activities are based in Electrical Engineering with emphasis in Electronic Instrumentation, Signal Processing and Dynamic Tests. He also participates as an Institutional Review INEP / MEC where he made 9 authorization assessment and recognition of courses since 2010. Among the research projects that participated in recent years, a post doctorate research at the University of Aarhus, Denmark where he developed applications OMA for analysis of aerospace structures and participated in a project that aimed to use OMA to estimate the concrete tower modal parameters and modulus of elasticity.

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Post doctorate

2014 - 2015 Aarhus University, AU, Denmark.
Grantee of: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior CAPES,Brasil.

Formal Education/Degree:

2001 - 2004 Ph.D. in Electronic Engineering–Nano Photonic.
University of Glasgow, GLASGOW, Scotland.
Year of degree: 2005.
Advisor: Professor Richard Michael De La Rue.
Grantee of: Coordenação de Aperfeiçoamento de Pessoal de NívelSuperior, CAPES ,Brasil
Keywords: Mach-Zehnder; Photonic; Design of optical devices and nanostructures.

1998 - 2000 Master in Electronics and Computational Engineering.
InstitutoTecnológico de Aeronáutica, ITA, Brasil.
Year of degree: 2001.
A*dvisor:* Prof Dr Wagner ChiepaCunnha.
Keywords: Data Acquisition; Telemetry; Tests; Aerospace.

1988 - 1995 Graduation in Electrical Engineering (BsC).
Universidade de Taubaté, UNITAU, Brasil.

Research Projects

2016: Geophone sensors applied to large structures measurements and transport measurements

Description:
The aim of this research project is to develop a measurement system for use in monitoring of large structures as well as serve as a remote system monitoring of loads during transport

Situation: Started; *Nature:* Research and Development.
Participant Students: Graduation(1)
Participants: EdilsonAlexandre Camargo –Felipe Ramon

2014 - 2015 Use of OMA to estimate the concrete tower modal parameters and modulus of elasticity.

Description:
The aim of this investigation is to separate the natural frequencies of the concrete tower from the foundation and via a simplistic model give a good estimate of soil-foundation interaction parameters. Through this analysis Young´s modulus of elasticity can be determined for tower, foundation and soil.

Situation: Concluded; *Nature:* Research.
Participant Students: Master's (2)
Participants: EdilsonAlexandre Camargo - Co-coordinator / Rune Blinker - Advisor / Jens PederUlfkjaer / Simon Steen Gadegaard–Master Studentt / Jens Norgaard – Master Student/ JørgenHangel - Sponsor
Sponsor(es): Conelto - Cooperation.*Academic Advisory rate:* 2.

2007 - 2015 Development and application of methods of analysis Operational Modal (OMA) Applied testing of components and aerospace systems.

Description:
The main objective of the research project is the development of a data analysis methodology from measurements on components and aerospace systems testing, based on the expansion of measurement points by comparison with the FE models. The results of this study can be applied to measurements made during the flight of launch vehicles, where there is a limitation of the measurement points due to the telemetry system capacity or difficulty of adding measurement points. As a secondary objective, the result of the methodology used, also will address the problems related to the lifting of the dynamic characteristics of system where there is structural change.

Situation: Concluded; *Nature:* Research
Participant Students: Master's (1).
Participants: EdilsonAlexandre Camargo - Coordinator / Rune Brincker / RogérioPirk / Naira Cunha Costa – Master Student
Sponsor(es): Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Scholarship.*Academic Advisory rate:* 1.

Other Kinds of Technical Production

1. CAMARGO, E. A. Digital Signal Processing. 2016. (Institutional Material Development).
2. CAMARGO, E. A. Digital Data Communication. 2016. (Institutional Material Development).
3. CAMARGO, E. A. Special Topics in Engineering. 2015. (Institutional Material Development).
4. CAMARGO, E. A. Sensors, 2010. (Institutional Material Development).