Lucas França

Personal Details

Full Name **Lucas Gabriel Souza França**.

Nationality **Brazilian**.

Place of Birth **Caculé, Brazil**.

E-mail **lucas.franca.14@ucl.ac.uk**.

Website **https://lucasfr.github.io**.

Education

2015– **Doctor of Philosophy - Neuroscience**, *University College London*.

2013–2015 **Master of Science**, *Federal University of Bahia*.
Master thesis approved with distinction. Area of concentration: Statistical Physics and Complex Systems

2009–2013 **Bachelor in Physics**, *Federal University of Bahia*.

Master's Thesis

Title *Variability: A Multifractal Approach for Physiological Data*

Supervisors Prof. José Garcia Vivas Miranda

Description This thesis explores the variability that lies behind a physiological signal with non-linear methods.

Experience

Abep-UK

2017–2018 **Chief Executive Officer at Abep-UK (Association of Brazilian Postgraduate Students and Researchers in the United Kingdom)**, https://abep.org.uk.
Abep-UK is a non-profit association that to congragate Brazilian postgraduate students and to represent them. All members of the board are voluntaries. In 2017, I was elected to the role of Chief Executive Officer.

2016–2017 **Financial director at Abep-UK (Association of Brazilian Postgraduate Students and Researchers in the United Kingdom)**, https://abep.org.uk.
Abep-UK is a non-profit association that to congragate Brazilian postgraduate students and to represent them. All members of the board are voluntaries. In 2016, I was elected to take the financial director role.

PhD Research Project

2015– **Science without Borders scholar**.
This project is developed under the supervision of Prof. Matthew Walker and Dr Yujiang Wang. The study consists of applying multifractal concepts to the study of emergence of epileptic seizures. The study is funded by the Brazilian funding agency Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq).

MSc Research Project

2013–2015 **Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) scholar**.

This project was developed under the advisory of the Dr. José Garcia Vivas Miranda, in collaboration with the Prof. Pedro Montoya (Universitat de les Illes Balears, Spain). The goal was to explore the meaning of the variability in physiological signals. We applied a multifractal approach to series of activity of patients with fibromyalgia and healthy individuals.

Undergraduate Research Projects

2012–2013 **Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) scholar**.

This work was developed under the advisory of the Prof. José Garcia Vivas Miranda in colaboration with the Prof. Pedro Montoya (Universitat de les Illes Balears, Spain) and aimed to look for patterns in individuals activity series with methods of non-linear dynamics.

2011–2012 **Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) scholar**.

This work was developed under the advisory of the Prof. José Garcia Vivas Miranda and aimed to apply the CvMob software in analysis of trails of foraging ants. The data were analysed with non-linear methods.

Miscellaneous

2010–Present **Development and validation of CvMob Software**.

This project aims to develop a computer vision software to calculate the kinematic variables in videos of objects in movement.

Publications

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FRANCA, L. G. S.; MONTOYA, P.; Miranda, J. G. V. On multifractals: a non-linear study of actigraphy data. arXiv preprint arXiv:1702.03912. 2017 Feb 13. (In Review)

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SHARMA, N.; PEDREIRA, C.; CENTENO, M.; CHAUDHARY, U. J.; WEHNER, T.; FRANCA, L. G. S.; YADEE, T.; MURTA, T.; LEITE, M.; VOS, S. B.; OURSELIN, S. A Novel Scheme for the Validation of an Automated Classification Method for Epileptic Spikes by Comparison with Multiple Observers. Clinical Neurophysiology. 2017 May 4.

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DA SILVA COSTA, I; GAMUNDI, A; MIRANDA, J.G.; FRANCA, L. G. S.; DE SANTANA, C. N.; MONTOYA, P. Altered functional performance in patients with fibromyalgia. Frontiers in human neuroscience. 2017;11.

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PENA, N. ; CREDIDIO, B. C. ; CORREA, L. P. N. R. M. S. ; FRANCA, L. G. S. ; CUNHA, M. V. ; SOUSA, M. C. ; VIEIRA, J. P. B. C. ; MIRANDA, J. G. V. Instrumento livre para medidas de movimento. Revista Brasileira de Ensino de Fisica, v. 35, p. 1-5, 2013.

Computer skills

Programming C++, MatLab, R, Python, Julia

LaTeX, Linux

Languages

Portuguese	**Native Speaker**
English	**Fluent**
French	**Fluent**
Spanish	**Basic** *Good Comprehension*