

Thiago de Paula Oliveira | CV



- » Statistical computing: R, Shiny, Maple, SageMath
- » Computational programs: Latex, Markdown, Office, Gimp, Inkscape, Github
- » Operational systems: Linux, Windows
- » Languages: Portuguese (native), English (upper intermediate)
- » Research web pages: ORCID, Plubons

Thiago is a Senior Biostatistician at Orreco working in partnership with the Insight Centre for Data Analytics and National University of Ireland Galway (NUIGalway). His expertise is in **statistical modelling**, in particular the study of individual level responses over time. Thiago holds a PhD in Statistics from the University of São Paulo, Brazil. He has over **six years experience in all aspects of statistical modelling** and has published several peer-reviewed papers. Before joining Orreco, Thiago was Assistant Professor and postdoctoral researcher at the University of São Paulo. During his undergraduate, he was enjoyed in a project granted by São Paulo Research Foundation, and involving the Biological Sciences and Exact Sciences Departments. This project led to publication of two peer-review papers, and a conference paper which won honorable mention by the University of São Paulo. His research interests comprise longitudinal data, concordance analysis, response prediction, generalized linear mixed-effects model, computing for statistical development (specially in R software), experimental designs, observational study, development of dashboard designs (specially in Shiny), and agriculture.

»»» Education

2014 – 2018 PhD in Statistics
(4 years)

University of São Paulo –
ESALQ/USP

- » Title: Estimating the longitudinal concordance correlation through fixed effects and variance components of polynomial mixed-effects regression model
- » Advisor: Dr. Silvio Sandoval Zocchi and Prof. John Hinde
- » Department of Exact Sciences

2016 Visiting scholar – internship
(3 months)

NUIGalway

- » Supervisor: Prof. John Hinde
- » School of Mathematics, Statistics and Applied Mathematics
- » Development of new methodology in Concordance Analysis

2012 – 2014 MSc in Statistics
(2 years)

University of São Paulo –
ESALQ/USP

- » Title: Mixed-effects models applied to hue peel color of papaya cv. Sunrise Solo measured by an scanner and colorimeter over time
- » Advisor: Dr. Silvio Sandoval Zocchi
- » Department of Exact Sciences

2007 – 2012 BSc in Agricultural Engineering
(5 years)

University of São Paulo –
ESALQ/USP

- » Title: Calibration of scanner methodology to evaluate 'Golden' papaya peel color.
- » Advisor: Dr. Silvio Sandoval Zocchi
- » Department of Exact Sciences

»»» Professional experience

2019
(8 months)

Postdoc in Biostatistics

NUI Galway

- » Supervisor: Prof. Dr. John Newell
- » Statistical modeling for optimizing athlete performance
- » School of Mathematics, Statistics & Applied Maths; Orreco; and Insight Centre for Data Analytics

2018-2019
(10 months)

Postdoc in Statistics

University of São Paulo –
ESALQ/USP

- » Advisor: Prof. Dr. Clarice Garcia Borges Demétrio
- » Title: Estimation of the longitudinal concordance correlation function: The lcc package
- » Department of Exact Sciences

2017 – 2019

Assistant Professor at University of São Paulo – ESALQ/USP (18 months)

»»» Volunteer experience

2016

Class tutor in Calculus at University of São Paulo – ESALQ/USP (5 months)

2015

Class tutor in Statistics at University of São Paulo – ESALQ/USP (5 months)

»»» Research experience

Generalized linear mixed-effects models (Classical and Bayesian)

Concordance analysis (Agreement, precision, and accuracy measures)

Bootstrap methods for confidence intervals (Non-parametric and parametric)

Experimental Designs (Complete and Incomplete Blocks, Latin Square, Full factorial, Fractional Factorial, Split-Plot, Central Composite, Nested designs)

Longitudinal data and Observational Studies

State space models (ARMA, ARIMA and Random Walk models)

Digital Image Analysis, Vegetal Production, Post-Harvest

Development of R packages, Dashboard Design, and Webpages (Github)

Publications

Table 1: Publications summary

	Article	R Package	Abstract	Manuscript
Number	4	1	6	2

Submitted manuscript	Oliveira, T.P. ; Moral, R. A.; Hinde, J.; Zocchi, S. S.; Demetrio, C. G. B. Estimation of the longitudinal concordance correlation function in R: The LCC package. Journal of Statistical Software . Submitted in September 2019.
Submitted manuscript	Kleina, H. T.; Kudlawiec, K.; Esteves, M. B.; Daibó, M.; Oliveira, T.P. ; Maluta, N.; Lopes, J. S.; Mio, L. M. Association of leaf morphology, vector settling and feeding behavior with resistance of plum genotypes to leaf scald disease. Entomologia Experimentalis et Applicata . Submitted in September 2019.
Article	Popin, G. V.; Santos, A. K. B.; Oliveira, T.P. ; Camargo, P. B.; Cerri, C. E. P.; Siqueira-Neto; M. Sugarcane straw management for bioenergy: effects of global warming on greenhouse gas emissions and soil carbon storage. Mitigation and Adaptation Strategies for Global Change , 2019. Link: https://doi.org/10.1007/s11027-019-09880-7
R package	Oliveira, T.P. ; Moral, R. A.; Hinde, J.; Zocchi, S. S.; Demetrio, C. G. B. lcc: Longitudinal Concordance Correlation , R package version 1.0.2, 2018. See also https://github.com/Prof-ThiagoOliveira/lcc
Article	Esteves, M. B.; Kleina, H. T.; Sales, T. M.; Oliveira, T.P. ; Lara, I. A. R.; Almeida, R. P. P.; Coletta-Filho, H. D.; Lopes, J. R. S. Transmission efficiency of <i>Xylella fastidiosa</i> subsp. <i>pauca</i> sequence types by sharpshooter vectors after <i>in vitro</i> acquisition. The American Phytopathological Society , v. 109, no.2, 2019. Link: https://doi.org/10.1094/PHYTO-07-18-0254-FI
Article	Oliveira, T.P. ; Hinde, J.; Zocchi, S. S. Longitudinal Concordance Correlation Function Based on Variance Components: An Application in Fruit Color Analysis. Journal of Agricultural, Biological, and Environmental Statistics , v. 23, p. 233-254, 2018. Link: https://doi.org/10.1007/s13253-018-0321-1
Article	Oliveira, T.P. ; Zocchi, S. S. ; Jacomino, A. P. Measuring color hue in 'Sunrise Solo' papaya using a flatbed scanner. Revista Brasileira de Fruticultura , v. 39, p. e-911, 2017. Link: http://dx.doi.org/10.1590/0100-29452017911
Extended abstract	Oliveira, T.P. ; Moral, R. A.; Hinde, J.; Zocchi, S. S.; Demétrio, C. G. B. The longitudinal concordance correlation. In: 34th International Workshop on Statistical Modelling , 2019, Guimarães. Proceedings of the 34 th International Workshop on Statistical Modelling, 2019. v. 2.
Extended abstract	Oliveira, T.P. ; Moral, R. A.; Hinde, J.; Demétrio, C. G. B.; Zocchi, S. S.; Zanardo, A. B. R.; Delalibera Jr., I. Generalized linear mixed models applied to overdispersed proportion data in a fungal occurrence study. In: 30th International Workshop on Statistical Modelling , 2015, Linz. Proceedings of the 30 th International Workshop on Statistical Modelling, 2015. v. 2. p. 203-206.
Abstract	Oliveira, T.P. ; Moral, R. A. ; Hinde, J. ; Demétrio, C. G. B. ; Zocchi, S. S. Generalized linear mixed models: an application in fungal occurrence data. In: 60^a Reunião Anual da Região Brasileira da Sociedade Internacional de Biometria e 16^o Simpósio de Estatística Aplicada à Experimentação Agrônômica , 2015, Presidente Prudente. Reunião Anual da Região Brasileira da Sociedade Internacional de Biometria, n. 60, Presidente Prudente, 2015. 172 p., 2015.
Abstract	Oliveira, T.P. ; Zocchi, S. S. ; Ferreira, I. E. P. . Mixed models for analysis of hue peel colour of papaya (<i>Carica papaya</i> L.) cv. Sunrise Solo, measured along time by means of a scanner and a colorimeter. In: XXVII International Biometric Conference, 2014, Florence, Italy. Proceedings of XXVII International Biometric Conference, 2014. v. 1.

Extended abstract

Oliveira, T.P.; Zocchi, S. S. . Análise de dados circulares com aplicação em tonalidade da cor de casca de mamão 'Sunrise Solo'. In: **58ª Reunião Anual da Região Brasileira da Sociedade Internacional de Biometria e 15º Simpósio de Estatística Aplicada à Experimentação Agrônômica**, 2013, Campina Grande. Anais..., 2013. p. 202.

Abstract

Camara, G. M. S.; **Oliveira, T.P.;** Navarro, B. L. ; Briigliadori, L. D. Crescimento e produtividade de soja em três arranjos espaciais. In: **VI Congresso Brasileiro de Soja**, 2012, Cuiabá-MT. Anais. Londrina-PR : Embrapa Soja, 2012. v. 1. p. 151-153.

Reviewer

2019 Biocontrol Science and Technology, Taylor & Francis [Link](#)

» Number of papers reviewed: 1

Masters and PhD Examiners

2019 Nascimento, C.O.; Lara, I.A.R. Analysis of color peel of the papaya cv. Sunrise Solo through of the mixed linear regression model. Thesis (Master's Degree in Statistics) – University of São Paulo, Piracicaba, Brazil.

Awards

2010 Honorable Mention at the 18th USP International Symposium of Undergraduate Research, University of São Paulo.

Extracurricular courses (last 5 years)

2019 Survival Analysis in R. DataCamp, USA. (4h)

2019 Building Web Applications in R with Shiny: Case Studies Course. DataCamp, USA. (4h)

2019 Building Dashboards with shinydashboard. DataCamp, USA. (4h)

2019 Building Web Applications in R with Shiny. DataCamp, USA. (4h)

2019 Introduction to Python. DataCamp, USA. (4h)

2019 Statistical Modeling in R (Part 1). DataCamp, USA. (4h)

2019 Intermediate R. DataCamp, USA. (6h)

2019 Introduction to R. DataCamp, USA. (4h)

2018 Machine Learning Toolbox. DataCamp, USA. (4h)

2016 Longitudinal and Incomplete Data – USP (30h)

2015 Short curse on Regression Models – Coursera, MOOC, USA (36h)

2015 Short curse on Dimensionality Reduction – USP

2015 Additive Generalized Models with P-splines – RBras

2015 Exploring interactive graphical interfaces in R – RBras

2015 Exploring the Flexibility of Linear Mixed Models – RBras

2015	Special Topics in Multivariate Analysis – RBras
2014	Generalized Additive Models with P-splines – USP

»»» Event participation (last 5 years)

2019	The Inaugural Young-ISA Meeting – Maynooth, Co. Kildare, Ireland
2019	34 th meeting of the International Workshop on Statistical Modelling (IWSM) – Guimarães, Portugal.
2016	NUIG Statistics MiniSymposium. Longitudinal Concordance correlation function based on variance components: an application in fruit color analysis.
2015	30 th meeting of the International Workshop on Statistical Modelling (IWSM) – Linz, Vienna.
2015	60 th meeting of the Brazilian Region International Biometric Society (RBras) e 16° “Simpósio de Estatística Aplicada à Experimentação Agronômica” – Presidente Prudente, SP, Brazil
2015	How to Write for and Get Published in Scientific Journals – Piracicaba, SP, Brazil
2014	II Workshop on Longitudinal and Incomplete Data – Piracicaba, SP, Brazil
2014	I Workshop on Experimental Statistics e IV “Encontro dos Alunos do PPG em Agronomia” – Piracicaba, SP, Brazil

»»» Lectured disciplines

2018	LCE0120 Calculus I – ESALQ/USP
2018	LCE0602 Experimental Statistics – ESALQ/USP
2018	LCE0220 Calculus II – ESALQ/USP
2017	LCE0602 Experimental Statistics – ESALQ/USP
2017	LCE0120 Calculus II – ESALQ/USP

»»» Lectured workshops and invited talks

2019	Modelling menstrual cycle length using state space models. The Inaugural Young-ISA Meeting – Maynooth, Ireland
2018	I Workshop on Introduction to Experimental Design – ESALQ/USP
2016	Longitudinal concordance correlation function based on variance components: an application in fruit color – NUI Galway

»»» Professional websites

Github	https://github.com/Prof-ThiagoOliveira	Link
lccApp	https://prof-thiagooliveira.shinyapps.io/lccApp/	Link
Calculus	https://prof-thiagooliveira.github.io/calculus/	Link

Academic	https://prof-thiagooliveira.github.io/AcademicProfile/	Link
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»»» Fellowship

2011	São Paulo Research Foundation	FAPESP
» Scientific initiation / Advisor: Prof. Silvio Sandoval Zocchi » Process number: 2010/16955-1 » Grants awarded: approximately £3.000		
2012-2013	Coordination of Improvement of Higher Education Personnel	CAPES
» Master / Advisor: Prof. Silvio Sandoval Zocchi » Project: Mixed effects models applied to hue peel color of papaya (<i>Carica papaya</i> L.) cv. "Sunrise Solo" measured over time using a scanner and a colorimeter » Grants awarded: approximately £15.082		
2014-2017	National Council for Scientific and Technological Development	CNPq
» PhD / Advisor: Prof. Silvio Sandoval Zocchi » Project: Estimating the longitudinal concordance correlation through fixed effects and variance components of polynomial mixed-effects regression model » Grants awarded: approximately £26.543		
2018-2019	Coordination of Improvement of Higher Education Personnel	CAPES
» Postdoctoral Researcher / Coordinator: Prof ^a . Clarice G. B. Demétrio » Project: Estimation of Longitudinal Concordance Correlation Function: The lcc package » Grants awarded: approximately £7.000		
2019	Science Foundation Ireland	SFI
» Postdoctoral Researcher in Biostatistics / Coordinator: Prof. John Newell » Project: Development of statistical model with application in athlete performance » Project Funding: €12.417.097		

»»» References

Prof. John Hinde

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