Thiago de Paula Oliveira | CV

▶ Statistical computing: R, Shiny, Bash, Maple, SageMath, C++, blupf90

▶ Computational programs: LaTeX, Markdown, Office, GitHub, Inkscape

Operational systems:
Linux, Mac, Windows

▶ Languages: Portuguese (native), English

Research web pages: ORCID, Plubons, Personal Webpage



General Information

Work Address: The University of Edinburgh, Easter Bush Campus, Midlothian EH25 9RG, Scotland

▶ Tel: +44 7474 338884

▶ E-mail Address: thiago.oliveira@ed.ac.uk

Date of Birth 01 February 1985, Tatuí, Brazil

▶ Nationality: Brazilian

Marital Status: Married

Summary

I hold a PhD in Statistics from the University of São Paulo, Brazil, and have at least eight years of experience in experimental statistics, statistical modelling, and concordance analysis. As a PhD candidate, I was a visiting Scholar at the National University of Ireland in 2016, working with statistical modelling for agricultural data. Besides, I was a lecturer in the Department of Exact Sciences at ESALQ/University of São Paulo, Piracicaba, São Paulo, Brazil, from 2017 to 2019.

I worked as a Researcher Biostatistician from 2019 to 2020 at Insight Centre for Data Analytics in partnership with Orreco, School of Mathematics, Statistics, Applied Mathematics, and NUI Galway to develop statistical methods applied to athlete performance and predictive models for COVID-19. I developed statistical methods in longitudinal concordance correlation, multilevel or hierarchical model, generalized linear mixed-effects model, state-space models, experimental design, and longitudinal data.

As an enthusiast of the usage of dashboard apps to create an interactive data visualization, I believe that interactive applications are an easier way to create visual representations of large-scale data sets, allowing the user to explore the complex reality of the database or even handle multiple sets of data in a single visualization.

Recently, I was awarded a Marie Skodowska-Curie COFOUND Fellowship (Train@Ed) to work at The Roslin Institute - The University of Edinburgh, where I currently work on the development of statistical models applied to quantitative genetics and genomics of plant breeding in partnership with Limagrain.

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 (3 months) Visiting scholar – internship

NUIGalway

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

2012 - 2014 (2 years)

2012 - 2014 MSc in Statistics

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 (5 years)

2007 - 2012 BSc in Agricultural Engineering

University of São Paulo – ESALQ/USP

▶ Title: Calibration of scanner methodology to evaluate 'Golden' papaya peel color.

Advisor: Dr. Silvio Sandoval Zocchi

Aspire Academy research collaboration project

▶ Department of Exact Sciences

Professional experience

2020-Actual	Researcher Fellow	University of Edinburgh
	▶ PI: Dr. Gregor Gorjanc	
	Quantitative genetics and genomics of plant breeding	
	➤ The Roslin Institute	
2020 (3 months)	Postdoc in Biostatistics	NUIGalway
	▶ Supervisor: Prof. Dr. Carl Scarrott	
	▶ Early Detection of Secondary Waves of Covid-19 Infections	
	School of Mathematics, Statistics & Applied Maths; and Insigh	t Centre for Data Analytics
2020 (3 months)	Postdoc in Biostatistics	NUIGalway
	➤ Supervisor: Prof. Dr. John Newell	

School of Mathematics, Statistics & Applied Maths; and Insight Centre for Data Analytics

2019 (8 months)	Postdoc in Biostatistics	NUIGalway
	Supervisor: Prof. Dr. John Newell	
	Statistical modeling for optimizing athlete performance	
	School of Mathematics, Statistics & Applied Maths; Orreco Analytics	o; and Insight Centre for Data
2018-2019	Postdoc in Statistics	University of São Paulo –
(10 months)		ESALQ/USP
	▶ Advisor: Prof. Dr. Clarice Garcia Borges Demétrio	
	▶ Title: Estimation of the longitudinal concordance correlation f	function: The lcc package
	<u> </u>	and the factoriage
	Department of Exact Sciences	

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

Volunteer experience

2017 - 2019

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

Development of cattle and plant breeding programmes
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)
Development of R packages, Dashboard Design, and Webpages (Github)

Publications

	rable 1:	Publication	s and index	ces summar	⁻ y
Article	R Package	Abstract	Preprint	H-Index	Times Cited
9	2	12	1	6	82

	Papers in Peer-Reviewed Journals
Article	Lara, L.A.d.C.; Pocrnic, I.; Oliveira, T.d.P. ; Gaynor, C.; Gorjanc, G. Temporal and genomic analysis of additive genetic variance in breeding programmes, Heredity , 2021. DOI: 10.1038/s41437-021-00485-y
Article	Oliveira, T.P. ; Buinvels, G; Pedlar, C.; Newell, J. Modelling menstrual cycle length in athletes using state-space models, Scientific Reports , 11, 2021. DOI: 10.1038/s41598-021-95960-1

Oliveira, T.P.; Moral, R.A. Global Short-Term Forecasting of Covid-19 Cases, Scientific Re-Article ports, 2021. DOI: https://doi.org/10.1038/s41598-021-87230-x

Oliveira, T.P.; Moral, R. A.; Zocchi, S. S.; Demetrio, C. G. B; Hinde, J. Icc: an R package Article to estimate the concordance correlation, Pearson correlation, and accuracy over time. PeerJ. Accepted for publication in August of 2020. DOI: 10.7717/peerj.9850

> 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 resistence of plum genotypes to leaf scald disease. Entomologia Experimentalis et Applicata. Accepted

for publication in August of 2020. DOI: 10.1007/s10658-020-02104-8

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

> 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 Xylella fastidiosa subsp. pauca sequence types by sharpshooter vectors after in vitro acquisition. The American Phytopathological Society, v. 109, no.2, 2019. Link: https://doi.org/10.1094/PHYTO-07-18-0254-FI

> 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

> 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

Software

Gorjanc, Gregor; Obsteter, Jana; Oliveira, T.P. Partition/Decomposition of Breeding Values by Paths of Information, R package version 0.9.3, 2022. See also https://github.com/ AlphaGenes/AlphaPart/tree/version-0.9.3

Oliveira, T.P.; Moral, R. A.; Hinde, J.; Zocchi, S. S.; Demetrio, C. G. B. Icc: Longitudinal Concordance Correlation, R package version 1.0.2, 2018. See also https://github.com/ Prof-ThiagoOliveira/lcc

Preprints

Oliveira, T.d.P.; Obšteter, J.; Pocrnic, I.; Heslot, N.; Gorjanc, G. A method for partitioning trends in genetic mean and variance to understand breeding practices, BioRxiv, 2022. DOI: https://doi.org/10.1101/2022.01.10.475603

Proceedings

Oliveira, T.d.P.; Obšteter, J.; Pocrnic, I.; Gorjanc, G. A method for partitioning trends in genetic Extended abstract mean and variance to understand/improve breeding practices, In: World Congress on Genetics **Applied to Livestock and Production**

> 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 34th International Workshop on Statistical Modelling, 2019. v. 2.

> Zocchi, S.S.; Oliveira, T.P. Propagação de Penicillium em Iaranja (Citrus cinensis): estimulando o aprendizado de cálculo. 1º Oficina para o desenvolvimento docente de 2017, "Novas abordagens de ensino - compartilhando experiências na ESALQ", 2017

Article

Article

Article

Article

Article

R package

R package

Preprint

Extended abstract

Abstract

Abstract

Oliveira, T.P.; Hinde, J.; Zocchi, S.S. Longitudinal Concordance correlation function based on variance components: an application in fruit color analysis. NUIG Statistics MiniSymposium, 2016

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: 30**th **International Workshop on Statistical Modelling**, 2015, Linz. Proceedings of the 30th 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° Reunião Anual da Região Brasileira da Sociedade Internacional de Biometria e 16° Simpósio de Estatística Aplicada à Experimentação Agronômica, 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 (Carica papaya 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.

Abstract

Oliveira, T.P.; Zocchi, S.S. Mixed models for analysis of hue peel color of papaya (Carica papaya L.) cv. 'Sunrise Solo', measured along time by means of a scanner and a colorimeter. I Workshop on Experimental Statistics e IV Encontro dos Alunos do PPG em Agronomia (Estatística e experimentação agrnômica), 2014.

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 15° Simpósio de Estatística Aplicada à Esperimentação Agronômica, 2013, Campina Grande. Anais..., 2013. p. 202.

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: **58º Reunião Anual da Região Brasileira da Sociedade Internacional de Biometria e 15º Simpósio de Estatística Aplicada à Esperimentação Agronômica**, 2013, Campina Grande. Anais..., 2013. p. 202.

Abstract

Oliveira, T.P.; Zocchi, S. S. Modelos lineares de efeitos mistos: um estudo de caso. Encontro dos Alunos do Programa de Pós-Graduação em Estatística e e Experimentação Agronômica, 2013

Abstract

Camara, G. M. S.; Oliveira, T.P.; Navarro, B. L.; Brigliadori, 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.

Thesis

Thesis

Oliveira, T.P. Estimating the longitudinal concordance correlation through fixed effects and variance components of polynomial mixed-effects regression model. University of São Paulo, 2018

Thesis

Oliveira, T.P. Mixed-effects models applied to hue peel color of papaya cv. Sunrise Solo measured by an scanner and colorimeter over time. University of São Paulo, 2014

Masters and PhD Examiners

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 (Masters Degree in Statistics) – University of São

Paulo, Piracicaba, Brazil.

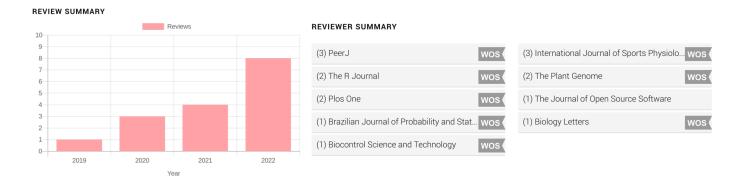
Silva, G.P.; Moral, R. A. Frame by frame completion probability of an American football pass. Thesis (Masters Degree in Statistics) – University of São Paulo, Piracicaba, Brazil.

2022

Das, Kishor. Statistical Approaches for Method Comparison Studies involving Functional Responses with Applications in Elite Sports. National University of Ireland Galway, Galway, Ireland. **Supervisors**: Newell, J. and **Oliveira, T.P.**

PhD

Reviewer



Awards

2020	Runner-up Poster on Young-ISA Twitter Poster Conference promoted by the Irish Statistical Association. Poster Title: Global short-term forecasting of Covid-19 cases. Authors: Oliveira , T.P. ; Moral, R.A., July, 2020
2020	Marie Skodowska-Curie COFUND Fellowship under the project "Quantitative genetics and genomics of plant breeding"
2010	Honorable Mention at the 18^{th} USP International Symposium of Undergraduate Research, University of São Paulo.

Extracurricular courses

2021	Workflows with Nextflow, University of Edinburgh (36h)
2021	Introduction to Bash Shell Scripting, Coursera Project Network (4h)
2021	World Meeting of the International Society for Bayesian Analysis (24h)
2021	Equality & Diversity Essentials (2h)
2021	UKRI-BBSRC Workshop on Computing in the Biosciences (6h)
2021	Challenging Unconscious Bias (1h)
2021	Genome-wide prediction of complex traits in humans, plants and animals (30h)
2020	Programming Fundamentals, Coursera, Duke University, USA. (32h)
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)

Phd in Statistics ·	Edinburgh,	Scotland ·	thiago.oliveira@ed.ac.uk	· Phone:	+44 7474	338884

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
2013	Short curse on Statistics: Making Sense of Data – Coursera, MOOC, USA
2013	Short curse on Mathematical Biostatistics Boot Camp – Coursera, MOOC, USA
2013	Introduction to Categorical Data Analysis – USP
2013	Structural Equations Models – USP
2013	Some Important Topics of Asymptotic Theory – USP

Event participation

2022	World Congress on Genetics Applied to Livestock Production (WCGALP)
2021	7th Summer Institute in Statistics for Big Data (SISBID)
2021	Genome-wide prediction of complex traits in humans, plants and animals
2021	Software Licensing Workshop
2020	71^{st} Annual Meeting of European Federation of Animal Science (EAAP)
2020	Why R? 2020 conference organized remotely
2019	The Inaugural Young-ISA Meeting – Maynooth, Co. Kildare, Ireland

2019	$34^{\it th}$ 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	$30^{\it th}$ 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
2013	58 th meeting of the Brazilian Region International Biometric Society e 15° "Simpósio de Estatística Aplicada à Esperimentação Agronômica" – São Paulo, SP, Brazil
2012	57 th meeting of the Brazilian Region International Biometric Society – Piracicaba, SP, Brazil
2011	19^{th} meeting of the USP International Symposium of Undergraduate Research – Piracicaba, SP, Brazil
2010	18^{th} meeting of the USP International Symposium of Undergraduate Research – Piracicaba, SP, Brazil

Teaching Experience

Taught Modules			
2018	LCE0602 Experimental Statistics, University of São Paulo, Piracicaba, Brazil, Agricultural Engineering programme, August-December.		
2018	LCE0220 Calculus II, University of São Paulo, Piracicaba, Brazil, <i>Agricultural Engineering programme</i> , August - December.		
2018	LCE0120 Calculus I, University of São Paulo, Piracicaba, Brazil, <i>Agricultural Engineering programme</i> , August - December.		
2018	LCE0120 Calculus I, University of São Paulo, Piracicaba, Brazil, <i>Agricultural Engineering programme</i> , February - June.		
2018	LCE0220 Calculus II, University of São Paulo, Piracicaba, Brazil, <i>Agricultural Engineering programme</i> , February - June.		
2018	LCE0130 Differential and Integral Calculus, University of São Paulo, Piracicaba, Brazil, <i>Food Science programme</i> , February - June.		
2017	LCE0602 Experimental Statistics, University of São Paulo, Piracicaba, Brazil, <i>Agricultural Engineering programme</i> , August - December.		
2017	LCE0120 Calculus II, University of São Paulo, Piracicaba, Brazil, <i>Agricultural Engineering programme</i> , August - December.		
	Taught Short Courses		
2021	Visualization and Data Structure on Breeding Programme Modelling with AlphaSimR, University of Edinburgh, Scotland		
2018	l Workshop on Introduction to Experimental Design, University of São Paulo, Piracicaba, Brazil		

Teaching Assistance

2016	LCE0120 - Calculus I, University of São Paulo, Piracicaba, Brazil, taught by Dr. Silvio Sandoval Zocchi for undergraduate students of the Agricultural Engineering programme, 120h
2015	LLCE0220 Calculus II, University of São Paulo, Piracicaba, Brazil, taught by Prof. Idemauro Antonio Rodrigues de Lara for undergraduate students of the Agricultural Engineering programme, August-December, 120h
2015	LLCE0211 Statistics, University of São Paulo, Piracicaba, Brazil, taught by Dr. Silvio Sandoval Zocchi for undergraduate students of the Agricultural Engineering programme, February-June, 120h
2013	LLCE0220 Calculus II, University of São Paulo, Piracicaba, Brazil, taught by Prof. Idemauro Antonio Rodrigues de Lara for undergraduate students of the Agricultural Engineering programme, August-December, 120h
2013	LLCE0166 Calculus and Mathematics Applied to Food Sciences, University of São Paulo, Piracicaba, Brazil, taught by Dr. Silvio Sandoval Zocchi for undergraduate students of the Food Sciences programme, February-June, 120h

Lectured workshops and invited talks

2021	Modelling menstrual cycle length in athletes using state-space models. Statistical weekly meeting, Brazil
2020	Global Short-Term Forecasting of Covid-19 Cases. Webinar Series of the Young-ISA, Ireland
2020	Global Short-Term Forecasting of Covid-19 Cases. Workshop on Applied Statistics: Prediction models for COVID-19, Artificial Intelligence and Postgraduate Research during pandemic time. University of São Paulo, Brazil
2020	Estimating NBA athlete performance using hierarchical models, National University of Ireland Galway, Ireland, 21 April 2020
2019	Modelling athletes menstrual cycle length using state space models. NUI Galway, Ireland
2019	Modelling menstrual cycle length using state space models. The Inaugural Young-ISA Meeting – Maynooth, Ireland
2016	Longitudinal concondance correlation function based on variance components: an application in fruit color – NUI Galway

Professional Websites

Blog	https://prof-thiagooliveira.netlify.app	Link
GitHub	https://github.com/Prof-ThiagoOliveira	Link

Funding - Grants & Contracts

2020-2023	TRAIN@Ed Fellow	Grant

- ▶ Marie Skodowska Curie COFUND fellowships
- ▶ PI: Gregor Gorjanc
- Quantifying the Drives of Genetic Change in Plant Breeding
- ▶ Project Funding: £70,000

2020-2020 Researcher in Biostatistics Postdoctoral

Science Foundation IrelandPI: Prof. Carl Scarrott

▶ Project: Early Detection of Secondary Waves of Covid-19 Infections

▶ Project Funding: €32,618

2020-2020 Researcher in Biostatistics

Postdoctoral

- ➤ Science Foundation Ireland
- ▶ PI: Prof. John Newell
- Project: Aspire Academy research collaboration project
- **▶** Project Funding: €20,000

2019-2019 Researcher in Biostatistics

Postdoctoral

- ➤ Science Foundation Ireland
- ▶ PI: Prof. John Newell
- ▶ Project: Development of statistical model with application in athlete performance
- **▶** Project Funding: €12,417,097

2018-2019 Researcher in Statistics

Postdoctoral

- ▶ Coordination of Improvement of Higher Education Personnel
- ▶ PI: Prof^a. Clarice G. B. Demétrio
- Project: Estimation of Longitudinal Concordance Correlation Function: The Icc package
- **▶** Grants awarded: approximately £7,000

>>> Media and Impact

Blog posts		
Post	Moral, R.A.; Oliveira, T.P. ; Parnell, A. How hard is it to predict COVID-19 cases? 2020. URL: https://www.hamilton.ie/covid19/posts/2020-10-01-how-hard-to-predict-cases/	
Post	Oliveira, T.P. Expressions in C++. 2020. URL: https://prof-thiagooliveira.netlify.app/post/expressions/	
Post	Oliveira, T.P. Signed and Unsigned Binary Numbers. 2020. URL: https://prof-thiagooliveira.netlify.app/post/signed-and-unsigned-binary-numbers/	
Post	Oliveira, T.P. The seven steps of a programer. 2020. URL: https://prof-thiagooliveira.netlify.app/post/the-seven-steps-of-a-programer/	

References

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University of Edinburgh

- ▶ Phone:
- ▶ Email: gregor.gorjanc@roslin.ed.ac.uk

Prof. Dr. Carl Scarrott

NUI Galway

- **Phone:** +64 3 3642587
- **▶** Email: carl.scarrott@canterbury.ac.nz

Prof. John Newell NUIGalway

Phd in Statistics · Edinburgh, Scotland · thiago.oliveira@ed.ac.uk · Phone: +44 7474 338884

Phone: +353 (0) 91 524411Email: john.newell@nuigalway.ie

Prof. John Hinde NUIGalway

Phone: +353 (0) 91 492043Email: john.hinde@nuigalway.ie

Dr. Rafael de Andrade Moral

Maynooth University

▶ Phone: +353 (1) 708 6645

▶ Email: rafael.deandrademoral@mu.ie

Address: The Roslin Institute, University of Edinburgh, Edinburgh, Scotland. H91 TK33