

CONTACT INFORMA- TION	João M. Pereira Office 503 Boyd Research and Education Center University of Georgia 200 D. W. Brooks Drive, Athens, GA 30602	<a href="https://joaompereira.github.io/">https://joaompereira.github.io/</a> <a href="mailto:jpereira@uga.edu">jpereira@uga.edu</a>
PERSONAL DATA	Full Name: João Morais Carreira Pereira Citizenship: Portugal	
PRESENT OCCUPA- TION	University of Georgia (UGA), Athens, GA, USA  Assistant Professor	<i>from January 2025</i>
PAST OCCU- PATION	Instituto de Matemática Pura e Aplicada (IMPA), Rio de Janeiro RJ, Brazil  Assistant Professor	<i>June 2022 to December 2024</i>
	University of Texas at Austin, Austin, TX, USA  Postdoctoral Associate in the Oden Institute for Computational Sciences – Supervised by Joe Kileel and Rachel Ward	<i>January 2021 to May 2022</i>
	Duke University, Durham, NC, USA  Postdoctoral Associate in the Department of Electrical and Computer Engineering – Supervised by Vahid Tarokh	<i>June 2019 to December 2020</i>
EDUCATION	Princeton University, Princeton, NJ, USA  Ph.D. in Applied and Computational Mathematics – Advised by Amit Singer and Emmanuel Abbe – Thesis: Information theoretic aspect of cryo-electron microscopy	<i>September 2014 to June 2019</i>
	University of Coimbra, Coimbra, Portugal  M.S. in Mathematics – GPA: 18.3/20	<i>September 2012 to September 2014</i>
	B.S. in Mathematics – GPA: 18.3/20	<i>September 2009 to July 2012</i>
PUBLICA- TIONS AND PRE-PRINTS CONFERENCE TALKS AND SEMINARS	46. Departmental Colloquium, Department of Statistics, University of Georgia, USA, September 2025 45. SIAM Conference on Applied Algebraic Geometry (AG25), Madison WI, USA, July 2025 44. 1st Carioca Workshop on Optimization and Applications (3-day Short Course), Getulio Vargas Foundation EMAP, Brazil, May 2025 43. Statistics Colloquium, Rice University, USA, April 2025 42. SIAM Conference on Computational Science and Engineering (CSE25) (Symposium co-organizer), Fort Worth TX, USA, March 2025 41. 2025 Georgia Scientific Computing Symposium, Georgia Tech, USA, February 2025 40. Workshop on Randomness and Learning on Networks, IMPA, Brazil, August 2024 39. Seminário de Pós-graduação, Laboratório Nacional de Computação Científica, Brazil, May 2024	

38. Departmental Colloquium, Department of Mathematics, University of Georgia, USA, April 2024
37. XVI Simpósio de Análise Numérica e Otimização, UFPR, Brazil, February 2024
36. Mathematics Seminars, Department of Mathematics, Texas A&M University, USA, February 2024
35. IDeAS Seminar, Princeton University (virtual), February 2024
34. Topical Workshop on Higher-Order Statistics and Symmetric Tensors (Co-organizer), Institute for Computational and Experimental Research in Mathematics, Brown University, USA, January 2024
33. Workshop on Optimization and Inverse Problems, UFSC, Brazil, October 2023
32. Conference on Personal Medicine, IMPA, Brazil, September 2023
31. Optimization Seminar, IMPA, Brazil, September 2023
30. Global Portuguese Mathematicians, Universidade de Coimbra, Portugal, June 2023
29. Seminário de Apresentação, IMPA, Brazil, March 2023
28. Seminário DMUC, Universidade de Coimbra, Portugal, December 2022
27. CAMGSD Seminar, Instituto Superior Técnico, Portugal, November 2022
26. CSP Seminar, University of Michigan, USA, October 2022
25. SIAM conference on Mathematics of Data Science (MDS), San Diego, USA, September 2022
24. Centro Pi seminar, IMPA, Brazil, September 2022
23. NUMA Seminar, KU Leuven (virtual), Belgium, April 2022
22. Mathematics of Data & Decisions Seminar, University of California at Davis (virtual), USA, April 2022
21. IMA Data Science Seminar, University of Minnesota, USA, April 2022
20. Oden Institute Seminar, University of Texas at Austin, March 2022
19. Machine Learning + X Seminar, Brown University (virtual), USA, December 2021
18. Conference on Neural Information Processing Systems, virtual, December 2021
17. MAD+ Seminar, ETH Zurich (virtual), Switzerland, November 2021.
16. Encontro Nacional da Sociedade Portuguesa de Matemática, Portugal (virtual), July 2021,
15. Youth in High Dimensions, Virtual, June 2021,
14. International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2020, Barcelona, Spain (Virtual), May 2020
13. Signal Processing/ECE Seminar, Duke University, December 2018
12. International Symposium in Information Theory (ISIT) 2018, Vail, Colorado, USA, June 2018
11. NMR Protein Determination: Theory and methods, Unicamp, Campinas, Brazil, May 2018
10. Conference on Information Sciences and Systems (CISS) 2018, Princeton University, March 2018
9. PACM Graduate Student Seminar, Princeton University, March 2018
8. PACM Graduate Student Seminar, Princeton University, February 2018
7. Mathematics, Information and Computation (MIC) Seminar, New York University, New York, USA, February 2018
6. PACM Graduate Student Seminar, Princeton University, October 2017
5. International Conference on Sampling Theory and Applications (SampTA) 2017, Tallinn, Estonia, July 2017

4. International Symposium in Information Theory (ISIT) 2017, Aachen, Germany, June 2017
3. PACM Graduate Student Seminar, Princeton University, February 2017
2. Strobl16, Time-Frequency Analysis and Related Topics, Strobl, Austria, June 2016
1. International Conference on Sampling Theory and Applications (SampTA) 2015, Washington D.C., USA, July 2015

TEACHING  
EXPERIENCE

- University of Georgia
- Special Topics in Numerical Analysis (MATH 8550) *Spring 2026*
  - Numerical Analysis (MATH 4500/6500) *Fall 2025*
  - Calculus I (MATH 2250) *Spring 2025*
- Instituto de Matemática Pura e Aplicada
- Linear Algebra and Applications *Spring 2023 and Spring 2024*
  - Machine Learning Projects *Spring 2023 to Fall 2024*
- University of Texas at Austin
- Real analysis I (Consultant) *Spring 2021*
- Duke University
- Multivariable Calculus for Economics *Fall 2020*
- Princeton University
- Transmission and Compression of Information (Assistant in Instruction) *Spring 2017*
  - Calculus I (Assistant in Instruction) *Fall 2015*
- Instructor and Tutor at Projecto Delfos *September 2009 to July 2014*
- Preparing the Portuguese team for the International Math Olympiads (IMO)
  - Deputy Leader of the Portuguese IMO team in 2014

AWARDS

- Awarded two *Young Talents in Mathematics* fellowships: 2009/2010 and 2010/2011 by *Calouste Gulbenkian Foundation*.
- University of Coimbra
- Merit awards for student with the best GPA: on 2011 and 2012
  - Prize for the 3% best students, 2011 and 2012
- Mathematical Olympiads
- International Mathematical Olympiads, Bronze Medal, 2009
  - Ibero-American Math Olympiads for Undergraduates, Bronze Medal, 2009
  - Portuguese Math Olympiads, Gold Medal, 2009 and Silver Medal, 2006
  - Sao Paulo Math Olympiads (Portugal and Brazil), Gold Medal (2006) and Silver Medal (2008)
  - Mayo Math Olympiads (Ibero-American), Silver Medal, 2006
- Other Olympiads
- Portuguese Physics Olympiads, 4<sup>th</sup> place, 2008
  - Ibero-American Physics Olympiads, Silver Medal, 2009

ADVISING

- Arthur Bizzi, IMPA, Ph.D.
- Gabriel Laurentino, IMPA, Masters

SERVICE

Co-organizer of the following symposia and workshops:

- “2026 Georgia Scientific Computing Symposium”, University of Georgia, February 2026
- “Tensors in Scientific Computing and Engineering“, 2-part Mini-symposium at SIAM Conference on Computational Science and Engineering (CSE) 2025, Fort Worth, March 2025
- “Randomness and Learning on Networks”, Instituto de Matemática Pura e Aplicada (IMPA), July 2024
- “Connecting Higher-Order Statistics and Symmetric Tensors”, Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, January 2024

Member of the Scientific Committee of the following workshops:

- “CariOPT, 1st Carioca Workshop on Optimization and Applications”, Getulio Vargas Foundation EMap, Brazil, May 2025

Referee for conference and journals, including: SIAM Journal on Mathematics of Data Science, IMA Journal of Inference and Applications, Conference on Learning Theory (COLT), IMS Statistical Sciences, Discrete & Computational Geometry, Springer Journal of Fourier Analysis and Applications, Journal of Machine Learning, IEEE Journal of Selected Topics in Signal Processing, Journal of Approximation Theory.

Treasurer for the Latino Graduate Student Association (LGSA), Princeton University, 2018

Organized the Graduate Student Seminar, Princeton University, 2016

Master’s students representative for the administration organ of the Mathematics Department of the University of Coimbra (2012-2013)

Administration of the Mathematics Student Association (NEMAT/AAC), integrated in the Academic Association of Coimbra, Vice-President, 2012 and President, 2013.

PROGRAMMING SKILLS

Experience coding in MATLAB, Python, C/C++ and Mathematica.

Experience implementing and training neural networks (using PyTorch).

Experience in object oriented programming, parallel computing and visual computing.

LANGUAGE SKILLS

Portuguese (Native Language) and English (Fluent).