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BIO SKETCH

André L. F. de Almeida is a Professor at the Teleinformatics Engineering Department of the Federal University of Ceara. He received a double Ph.D. degree in Sciences and Teleinformatics Engineering from the University of Nice, Sophia Antipolis, France, and the Federal University of Ceara, Fortaleza, Brazil, in 2007. From 2007 to 2008, he held a one-year teaching position at the University of Nice Sophia Antipolis, France. He was awarded multiple times visiting professor positions at the University of Nice Sophia Antipolis, France (2012, 2013, 2015, 2018, 2019). He served as an Associate Editor for several journals, such as the IEEE Transactions on Signal Processing (2012-2014 and 2014-2016), IEEE Signal Processing Letters (2016-2018 and 2018-2020), and IEEE Transactions on Vehicular Technology (2020-2022). He currently serves as a Senior Area Editor for the IEEE Signal Processing Letters. He has also served as Guest Editor for the EURASIP Journal on Advances in Signal Processing (2014, 2022), and Wireless Communications and Mobile Computing (2018, 2019). He also served on the Editorial Board of other journals, including Circuits, Systems & Signal Processing (2012-2018), Wireless Communications and Mobile Computing (2018-2020), the KSII Transactions on Internet and Information Systems (2012-2014), and the French journal Traitement du Signal (2016-2018).

Prof. Almeida is an elected member of the IEEE Signal Processing Society (SPS) Signal Processing Theory and Methods (SPTM) Technical Committee (2022-2024), and an elected member of the EURASIP Signal Processing for Multi-Sensor Systems Technical Area Committee (SPMuS TAC) (2016-2018 and 2019-2022). He is vice-chair of the EURASIP SPMuS TAC (2022-2023). He served as an elected member of the IEEE SPS Sensor Array and Multichannel (SAM) Technical Committee (2015-2018 and 2018-2021). He also served as an associate member of the Big Data Special Interest Group (SIG) of the IEEE SPS (2015-2018). Prof. Almeida currently serves as an IEEE SPS Regional Director-at-Large for Regions 7 & 9 (2022-2023). He was involved in the organization and chairing of several IEEE SPS conferences. In particular, he was a General Co-Chair of the 2017 IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP'2017), Technical Co-Chair of the IEEE GlobalSIP'2018 and IEEE GlobalSIP'2019 Symposia on Tensor Methods for Signal Processing and Machine Learning, Technical Co-Chair of the 11th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM'2020) and is the General Co-Chair of the IEEE CAMSAP'2023, Costa Rica. He is a level-1D research fellow of the CNPq (the Brazilian National Council for Scientific and Technological Development). In 2018, he was elected an Affiliate Member of the Brazilian Academy of Sciences. He is a co-recipient of the 2018 IET Communications Premium Award (2018), Best Paper Award at the 19th IEEE International Conference on OFDM and Frequency Domain Techniques (2016), Best Paper Award at the XXXVIII Brazilian Symposium of Telecommunications and Signal Processing (2020), and the 2022 IET Signal Processing Premium Best Paper Award (2022).

Prof. Almeida is a Senior Member of the IEEE. He has published over 200 papers in journals and conferences, 6 book chapters, and is co-inventor of 4 international patents. He has coordinated internationally funded research projects in mobile wireless communications, massive MIMO systems, array signal processing, and 5G networks. His research interests lie in signal processing for communications and sensor array and multichannel processing, including topics such as channel estimation and equalization, multi-antenna systems, blind and semi-blind signal processing, and direction of arrival estimation. An important part of his research has been dedicated to multilinear algebra and tensor decompositions with applications to communication systems and signal processing.

EDUCATION

- Ph.D, Sciences, University of Nice Sophia Antipolis, Nice, France, 2007.
- M.Sc., Teleinformatics Engineering, Federal University of Ceará, Fortaleza, Brazil, 2003.
- B.Sc., Electrical Engineering, Federal University of Ceará, Fortaleza, Brazil, 2001.

PROFESSIONAL EXPERIENCE

- Visiting Professor, University of Nice Sophia Antipolis, France (2012, 2013, 2015, 2018, 2019).
- Associate Professor, Teleinformatics Engineering, Federal University of Ceará (2010- present).
- Productivity Researcher of the CNPq (a Brazilian National Research Council) (2010-present).
- Post-doctoral Research Associate, I3S Laboratory, CNRS, France (2008-2009).
- Teaching Assistant, Electronics, Polytechnic School of Nice Sophia Antipolis (2007 -2008).
- Ph.D, Sciences, University of Nice Sophia Antipolis, Nice, France (2003- 2007).
- M.Sc., Teleinformatics Engineering, Federal University of Ceará, Fortaleza, Brazil (2002-2003).

PROFESSIONAL SERVICE

Editorial activities

- Senior Area Editor, IEEE Signal Processing Letters (2020- present)
- Associate Editor, IEEE Transactions on Vehicular Technology (2020 - present)
- Associate Editor, Frontiers in Communications and Networks Journal (2021-present)
- Associate Editor, IEEE Signal Processing Letters (2016-2020)
- Associate Editor, IEEE Transactions on Signal Processing (2012- 2016)
- Associate Editor, *Traitement du Signal* (2014-2018)
- Associate Editor, Circuits, Systems & Signal Processing (2012- 2018)
- Associate Editor, Wireless Communications and Mobile Computing (2018-2020)
- Associate Editor, KSII Transactions on Internet and Information Systems (2012- 2014)
- Lead Guest Editor, EURASIP Journal on Advances in Signal Processing, special issue "Recent advances in Tensor-Based Signal and Image Processing" (2014, 2022)
- Guest Editor, Wireless Communications and Mobile Computing, special issue “Applications of Tensor Models in Wireless Communications and Mobile Computing”, 2018
- Lead Guest Editor, Wireless Communications and Mobile Computing, special issue "Broadband Wireless Access for Rural and Remote Areas" of the Wireless Communications and Mobile Computing, 2019
- Guest Editor, EURASIP Journal on Advances in Signal Processing, special issue " Sparse/Low-rank Tensor Signal Processing for Communication and Radar Systems", 2021
- Guest Editor, Frontiers in Communications and Networks, special issue “Machine Learning and Artificial Intelligence for 5G and Beyond Technologies”, 2021

Societies and Technical Committees Memberships

- IEEE SPS Regional Director-at-Large, Regions 7 & 9 (2022-2023).
- Elected member of the IEEE Signal Processing Theory and Methods Technical Committee (SPTM-TC) (2021-2022)
- Elected member of the IEEE Sensor Array and Multichannel Technical Committee (SAM-TC) (2015-2018, 2018-2021)

- Vice-Chair of the EURASIP Signal Processing for Multi-Sensor Systems Technical Area Committee (SAT-SPMuS) (2022-2023)
- Elected member of the EURASIP Signal Processing for Multi-Sensor Systems Technical Area Committee (SAT-SPMuS) (2018-2021, 2022-2023)
- Associate member of the Big Data Special Interest Group (SIG) of IEEE SPS (2015-2018)
- IEEE Senior Member

Session Organizer and Chairing

- General Co-chair of the Seventh IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2023), Costa Rica, December 2023.
- General Co-Chair of the IEEE Workshop on Communication Networks and Power System (WCNPS 2021), Brasilia, November 2021.
- Technical Co-Chair of the XXXIX Brazilian Symposium on Telecommunications and Signal Processing (SBrT 2021), Fortaleza, September 2021.
- Organizer of the special session “Tensor Signal and Information Processing” at ASILOMAR conference on Signals, Systems and Computer (ASILOMAR-SSC 2021)
- Technical Co-Chair of the IEEE Workshop on Sensor Array and Multichannel Processing (SAM 2020), Hangzhou, China, June 2020.
- Area Chair of the European Signal Processing Conference (EUSIPCO 2021), Dublin, Ireland, August 2021.
- Area Chair of the European Signal Processing Conference (EUSIPCO 2020), Amsterdam, The Netherlands, August 2020.
- Area Chair of the European Signal Processing Conference (EUSIPCO 2019), A Coruña, Spain, August 2019.
- Technical Co-Chair of the Symposium on "Tensor Methods for Signal Processing and Machine Learning” at IEEE GlobalSIP 2019
- Technical Co-Chair of the Symposium on "Tensor Methods for Signal Processing and Machine Learning” at IEEE GlobalSIP 2018
- Organizer of the special session “Tensor Models for Array Processing” at ASILOMAR conference on Signals, Systems and Computer (ASILOMAR-SSC 2019)
- Organizer of the special session “Tensor Based Signal and Information Processing” at ASILOMAR conference on Signals, Systems and Computer (ASILOMAR-SSC 2018)
- Co-organizer of the special session “Advanced Tensor Methods for Big Data Processing” at the European Signal Processing Conference (EUSIPCO 2017)
- General Co-chair of the Seventh IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2017), Curaçao
- Organizer and chair of the special session "Tensor signal processing” at the Ninth IEEE Sensor Array and Multichannel Processing Workshop (SAM 2016), Rio de Janeiro, Brazil, 2016.
- Organizer and chair of the special session "Massive MIMO systems" at the Sixth IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2015), Cancun, Mexico, 2015.
- Organizer and chair of the special session "Tensor-based signal processing" at the Sixth IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2015), Cancun, Mexico, 2015.
- Organizer and chair of the special session "Tensor-Based signal processing" at the Eight IEEE Sensor Array and Multichannel Processing Workshop (SAM 2014), La Coruña, Spain, 2014.

- Organizer and chair of the special session "Tensor-based methods for multi-sensor signal processing" at the Fifth IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2013), Saint Martin, 2013.

Awards/Other

- Best Paper Award "2018 IET Communications Premium Award" (IET Digital Library: IET Communications - About (theiet.org)).
- Best Paper Award at the 19th IEEE International Conference on OFDM and Frequency Domain Techniques, August 2016.
- Best Paper Award at the XXXVIII Brazilian Symposium of Telecommunications & Signal Processing, November 2020.
- Elected an affiliate Member of the Brazilian Academy of Sciences (January 2018-present);
- Level-1D Research Fellow of the CNPq (the Brazilian National Council for Scientific and Technological Development, Ministry of Science, Technology and Innovation);
- Reviewer for innumerous conferences (VTC 2006 Fall, ISWCS 2006, PIMRC 2006, 2007, VTC 2007 Spring, ISWCS 2007, VTC 2007 Fall, EUSIPCO 2008, SPAWC 2008, VTC 2008 Fall, VTC 2009 Spring, EUSIPCO 2009, EUSIPCO 2011, SSP 2011, EUSIPCO 2012, ISWCS 2012, FIE 2013, CAMSAP 2013, CAMSAP 2014, ICSPCS 2013, GLOBECOM 2013, SIRS 2014, ICSPCS 2014, SAM 2014, SAM 2016, ICASSP 2014, ICASSP 2015, ICASSP 2016, ICASSP 2017).

SCIENTIFIC PRODUCTION

Journal Papers

[95] B. Sokal, P. R. B. Gomes, A. L. F. de Almeida, B. Makki, G. Fodor, "Reducing the Control Overhead of Intelligent Reconfigurable Surfaces Via a Tensor-Based Low-Rank Factorization Approach", *IEEE Transactions on Wireless Communications*, to appear, 2023.

[94] M. Giraud, V. Itier, R. Boyer, Y. Znyed, A. L. F. de Almeida, "Tucker Decomposition Based on a Tensor Train of Coupled and Constrained CP Cores", *IEEE Signal Processing Letters*, submitted, 2023.

[93] M. F. K. B. Couras, P. H. U. de Pinho, G. Favier, V. Zarzoso, A. L. F. de Almeida, J. P. J. da Costa, "Semi-Blind Receivers Based on a Coupled Nested Tucker-PARAFAC Model for Dual-Polarized MIMO Systems using Combined TST and MSMKron Codings", *Digital Signal Processing*, under review, 2022.

[92] P. R. B. Gomes, G. T. Araújo, A. L. F. de Almeida, B. Makki, G. Fodor, "Channel Estimation in RIS-Assisted MIMO Systems Operating Under Imperfections", *IEEE Transactions on Wireless Communications*, under review, 2022.

[91] H. Zheng, C. Zhou, Z. Shi, A. L. F. de Almeida, Y. Gu, "Coarray Tensor Completion for Direction-of-Arrival Estimation with Coprime Planar Array", in *IEEE Transactions on Aerospace and Electronic Systems*, accepted, 2023.

[90] G. T. Araújo, A. L. F. de Almeida, R. Boyer, "Semi-Blind Joint Channel and Symbol Estimation for Intelligent Surface Assisted MIMO Systems", in *IEEE Transactions on Signal Processing*, under review, 2022.

[89] Fazal-E-Asim, F. Antreich, C. C. Cavalcante, A. L. F. de Almeida, J. A. Nossek, "Efficient Hybrid A/D Beamforming for Millimeter-Wave Systems Using Butler Matrices", in *IEEE Transactions on Wireless Communications*, vol. 22, no. 2, pp. 1001-1013, Feb. 2023.

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[87] C. Enneking, F. Antreich, A. L. F. de Almeida, “Randomized Spectral Separation Coefficient for Short Code Acquisition Performance Evaluation”, *IEEE Transactions on Aerospace and Electronic Systems*, vol. 58, no. 3, pp. 1593-1608, June 2022.

[86] Fazal-E-Asim, A. L. F. de Almeida, F. Antreich, M. Haardt, C. C. Cavalcante, “Kronecker Product Based Space-Time Block Codes”, *IEEE Wireless Communications Letters*, vol. 11, no. 2, pp. 386-390, 2022.

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[63] P. R. B. Gomes, A. L. F. de Almeida, J. P. C. L. da Costa, R. T. de Sousa Jr., "A nested-PARAFAC based approach for target localization in bistatic MIMO radar systems, *Digital Signal Processing*, vol. 89, pp. 40-48, 2019.

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