Licks ATTORNEYS

ANDRÉ BARRETO

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PRACTICE AREAS

- Patents
- Industrial Designs
- Computer Programs
- Topographies of Integrated Circuits
- Regulatory

LANGUAGES

- Portuguese
- English
- French
- Spanish
- Italian

BIOGRAPHY

Dr. Andre Noll Barreto is a seasoned technologist and researcher with over 20 years of experience in telecommunications, specializing in 6G, 5G, wireless/optical technologies, and intellectual property. Dr. Barreto is a Head of Patents at Licks Attorneys, applying his deep expertise in wireless communications and intellectual property to support innovation and patent development.

Throughout his career, Dr. Barreto has held prominent roles at leading organizations such as Nokia, Barkhausen Institut, and INDT. At Nokia, he served as a Senior Research Specialist, focusing on cutting-edge research in wireless communications. During his tenure at Barkhausen Institut, he led projects on advanced wireless technologies, including joint communications and sensing, physical-layer security, and through-the-earth communications. His academic contributions include serving as a Professor at the Universidade de Brasília, where he taught and coordinated research projects in wireless and optical communications.

Dr. Barreto holds a PhD in Electrical Engineering from Technische Universität Dresden and a Master's degree in Telecommunications Engineering from Pontificia Universidade Católica do Rio de Janeiro. He is fluent in English, Portuguese, German, French, and Spanish, and is an IEEE Senior Member. Dr. Barreto is passionate about advancing wireless and optical communications, and he enjoys collaborating with researchers and industry partners to push the boundaries of technology.

PROFESSIONAL HIGHLIGHTS

- Chair of the Brazilian Communication Symposium (2012).

AFFILIATIONS

- Senior Member of IEEE;
- Chair of the Centro-Norte Brasil Section of IEEE

EDUCATION

- Doctor of Engineering (EngD), Electrical Engineering, Technical University Dresden – TUD (2001);
- Master's Degree (M.Sc), Electrical Engineering, Pontifical Catholic University of Rio de Janeiro – PUC-Rio (1996);
- Bachelor of Engineering (BEng), Electrical Engineering, Pontifical Catholic University of Rio de Janeiro – PUC-Rio (1994).

PUBLICATIONS

- Co-existence of Terrestrial and Non-Terrestrial Networks in S-band, arXiv, 2024;
- Physical layer security-from theory to practice, IEEE BITS the Information Theory Magazine, 2023;
- Correction to: RF Front-Ends for ISAC—Design Challenges and Potential Solutions, Integrated Sensing and Communications, 2023;
- Mobility Performance Analysis of RACH Optimization Based on Decision Tree Supervised Learning for Conditional Handover in 5G Beamformed Networks, arXiv, 2023;
- Physical Layer Security, Security and Privacy Vision in 6G: A Comprehensive Guide, 2023;
- RF Front-Ends for ISAC - Design Challenges and Potential Solutions, Integrated Sensing and Communications, 2023;
- Performance analysis of zero-padded sequences for joint communications and sensing, IEEE Transactions on Signal Processing, 2023;
- Filterbank secret key generation rates in multipath channels, GLOBECOM 2022-2022 IEEE Global Communications Conference, 2022;
- Hermespy: An open-source link-level evaluator for 6G, IEEE Access 10, 2022;
- Effective Equalization for Overlapped Chirp-based Communications Systems, 2022 IEEE 95th Vehicular Technology Conference:(VTC2022-Spring), 2022;
- Secret key generation rates over frequency selective channels, 2022 IEEE 95th Vehicular Technology Conference: (VTC2022-Spring), 2022;
- Secure communications in line-of-sight scenarios by rotation-based secret key generation, 2022 IEEE International Conference on Communications Workshops (ICC Workshops), 2022;
- Efficient Reliable Wireless Communications through Raptor Codes and Rateless Codes with Feedback, ICC 2022-IEEE International Conference on Communications, 2022;
- A study on physical layer security through ray tracing simulations, 2022 16th European Conference on Antennas and Propagation (EuCAP), 2022;
- Meta-surface boosted antenna to achieve higher than 50 db trx isolation at 26 ghz for joint communication and radar sensing (JC&S), 2022 16th European Conference on Antennas and Propagation (EuCAP), 2022;
- A half-duplex joint communications and sensing system using ZP-OFDM, 2022 2nd IEEE International Symposium on Joint Communications & Sensing (JC&S), 2022;
- Context-aware security for 6G wireless: The role of physical layer security, IEEE Communications Standards Magazine, 2022.