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Academic Qualifications

University/Institution	Type	Degree	Period
Instituto Universitário de Lisboa (ISCTE-IUL)	PhD	Doutoramento em Telecomunicações	2012

Teaching Activities

Teaching Year	Sem.	Course Name	Degree(s)	Coord.
2026/2027	2º	Big Data Processing	Bachelor Degree in Data Science;	Yes

2026/2027	2º	Big Data Processing and Modeling	Institutional Degree in Escola de Tecnologias e Arquitetura;	Yes
2026/2027	1º	Fundamentals of Computer Architecture	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering;	No
2025/2026	2º	Big Data Processing	Bachelor Degree in Data Science;	Yes
2025/2026	2º	Big Data Processing and Modeling	Institutional Degree in Escola de Tecnologias e Arquitetura;	Yes
2025/2026	1º	Computer and Operating Systems Fundamentals	Post Graduation Program in STEAM Bridge Program;	Yes
2025/2026	1º	Fundamentals of Computer Architecture	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering;	No
2024/2025	2º	Operating Systems	Bachelor Degree in Computer Engineering; Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2024/2025	1º	Computer and Operating Systems Fundamentals	Post Graduation Program in STEAM Bridge Program;	Yes
2024/2025	1º	Fundamentals of Computer Architecture	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering;	No
2022/2023	2º	Operating Systems	Bachelor Degree in Computer Engineering; Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2022/2023	1º	Fundamentals of Computer Architecture	Bachelor Degree in Computer Engineering; Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	Yes
2021/2022	2º	Operating Systems	Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering;	No
2021/2022	1º	Fundamentals of Computer Architecture	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Computer Science and Business Management;	Yes

2020/2021	2º	Operating Systems	Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2020/2021	1º	Fundamentals of Computer Architecture	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Computer Science and Business Management;	Yes
2019/2020	2º	Circuits for Communications		No
2019/2020	1º	Fundamentals of Computer Architecture	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	Yes

Supervisions

• M.Sc. Dissertations

- Concluded

	Student Name	Title/Topic	Language	Institution	Concluding Year
1	Francisco Sousa Nunes	Air quality monitoring with bicycles using low-cost sensors	English	Iscte	2024
2	Mariana de Almeida Barros	Network of sensors for measuring environmental pollution using open-source /open-hardware methodologies	English	Iscte	2020
3	Joana Micaela da Silva Rodrigues	Performance Analysis of MongoDB in High Distribution and Partition Data Scenarios	Portuguese	Iscte	2018
4	João Paulo Cordeiro Andrade	Motion-induced sound level control for socially-aware robot navigation	Portuguese	Iscte	2018
5	Pedro Miguel da Luz Cabrita de Sousa Brosque	PROSHOT - assistente pessoal de fotografia	Portuguese	Iscte	2018
6	André de Sousa Silvério	Propagation Model for Cellular Mobile Networks user in UAVS Communication Environments	English	Iscte	2017
7	José Alberto Porfírio Pequeno Lourenço	poRsCHE - Remote Control via Head movEs	Portuguese	Iscte	2016

Total Citations

Web of Science®	66
Scopus	73

Publications

• Scientific Journals

- Scientific journal paper

1	Correia, C., Santana, P., Martins, V., Mariano, P., Almeida, A. & Almeida, S. M. (2024). Advancing air quality monitoring: A low-cost sensor network in motion – Part I. Journal of Environmental Management, 360. https://doi.org/10.1016/j.jenvman.2024.121179 - Times Cited Web of Science®: 2 - Times Cited Scopus: 6 - Times Cited Google Scholar: 12
2	Correia, C., Martins, V., Matroca, B., Santana, P., Mariano, P., Almeida, A....Almeida, S.M. (2023). A low-cost sensor system installed in buses to monitor air quality in cities. International Journal of Environmental Research and Public Health, 20(5). https://doi.org/10.3390/ijerph20054073 - Times Cited Web of Science®: 15 - Times Cited Scopus: 16 - Times Cited Google Scholar: 23
3	Santana, P., Almeida, A., Mariano, P., Correia, C., Martins, V. & Almeida, S. M. (2021). Air quality mapping and visualisation: An affordable solution based on a vehicle-mounted sensor network. Journal of Cleaner Production, 315. https://doi.org/10.1016/j.jclepro.2021.128194 - Times Cited Web of Science®: 29 - Times Cited Scopus: 28 - Times Cited Google Scholar: 38
4	Andrade, J., Santana, P. & Almeida, A. (2019). Self-supervised learning of motion-induced acoustic noise awareness in social robots. Journal of Automation, Mobile Robotics and Intelligent Systems, 13(1), 3?14. https://doi.org/10.14313/JAMRIS_1-2019/1 - Times Cited Scopus: 2 - Times Cited Google Scholar: 3
5	Almeida, A., Silva, P. C. & Torres, Maria M. (2011). Generation of Sidel'nikov sequences and their spectra via permutations. Electronics Letters, 47(19), 1079?1080. https://doi.org/10.1049/el.2011.2415 - Times Cited Web of Science®: 2
6	Almeida, A. & Franca, J. (1996). Digitally-programmable analog building blocks for the implementation of artificial neural networks. IEEE Trans. on Neural Networks, 7(2). https://doi.org/10.1109/72.485684 - Times Cited Web of Science®: 4 - Times Cited Scopus: 5 - Times Cited Google Scholar: 18

• Books and Book Chapters

- Book editor

1	Pintassilgo, S., Almeida, A., Nunes, A. C., Soares, H., Correia, I., Costa, P....Alvito, M. (2025). Novos exemplos de práticas pedagógicas e estratégias de inovação pedagógica no Iscte. Iscte – Instituto Universitário de Lisboa.
2	Alexandre, J., Almeida, A., Espírito-Santo, Ana, Martins, A., Aguiar, C. & Simões, N. (2023). Exemplos de Práticas Pedagógicas e Estratégias de Inovação Pedagógica no Iscte. Iscte.

• Conferences/Workshops and Talks

- Publication in conference proceedings

1	Mariano, P., Almeida, S. M., Almeida, A., Correia, C., Martins, V., Moura, J....Santana, P. (2022). An information system for air quality monitoring using mobile sensor networks. In Gini, G., Nijmeijer, H., Burgard, W., and Filev, D. (Ed.), Proceedings of the 19th International Conference on Informatics in Control, Automation and Robotics (pp. 238?246). SCITEPRESS - Science and Technology Publications. https://doi.org/10.5220/0011320400003271 - Times Cited Web of Science®: 2 - Times Cited Scopus: 2 - Times Cited Google Scholar: 2
2	Barros, M., Almeida, A., Santana, P. & Monge, J. (2020). Environmental pollution monitoring based on sensor network and open-software-open-hardware. In Gavrilas, M., and Neagu, B.-C. (Ed.), 2020 International Conference and Exposition on Electrical And Power Engineering (EPE) (pp. 564?569). IEEE. https://doi.org/10.1109/EPE50722.2020.9305639 - Times Cited Scopus: 3 - Times Cited Google Scholar: 3
3	Santana, P., Almeida, A., Mariano, P., Correia, C., Martins, V. & Almeida, S. M. (2020). An affordable vehicle-mounted sensing solution for mobile air quality monitoring. In Solic, P., Nizetic, S., Rodrigues, J. J. P. C., Lopez-de-Ipina, G.-de.-A. D., Perkovic, T., Catarinucci, L., and Patrono, L. (Ed.), 2020 5th International Conference on Smart and Sustainable Technologies (SpliTech). IEEE. https://doi.org/10.23919/SpliTech49282.2020.9243697 - Times Cited Scopus: 7 - Times Cited Google Scholar: 8
4	Andrade, J., Santana, P. & Almeida, A. (2018). Motion-induced acoustic noise awareness for socially-aware robot navigation. 18th IEEE International Conference on Autonomous Robot Systems and Competitions, ICARSC 2018 (pp. 24?29). IEEE. https://doi.org/10.1109/ICARSC.2018.8374155 - Times Cited Web of Science®: 3 - Times Cited Scopus: 2 - Times Cited Google Scholar: 2
5	Caldeira, A. & Almeida, A. (2018). Harvesting indoor available light for low-power wireless networks. In IEEE (Ed.), 6th International Conference on Wireless Networks and Mobile Communications. IEEE. https://doi.org/10.1109/WINCOM.2018.8629660
6	Almeida, A., Cercas, E. B., Sebastião, P. & Cercas, F. (2014). Performance of generalized TCH codes for Rayleigh channels. Telecommunications (ICT), 2014 21st International Conference on (pp. 384?389). IEEE. https://doi.org/10.1109/ICT.2014.6845144
7	Almeida, A. (2014). Performance of generalized TCH codes for Rayleigh channels. Telecommunications (ICT), 2014 21st International Conference on (pp. 384?389).
8	Almeida, A. P. (2012). Generalized TCH codes via Zech logs. 2012 International Symposium on Signals, Systems, and Electronics (ISSSE). IEEE. https://doi.org/10.1109/ISSSE.2012.6374313

9	Almeida, A. (2012). On the structure of Sidel'nikov sequences for Pythagorean primes. International Symposium on Signals, Systems and Electronics (ISSSE 2012) (pp. 296?301).
10	Almeida, A. (2012). Generalised TCH codes via Zech logs. International Symposium on Signals, Systems and Electronics (ISSSE 2012) (pp. 367?372).
11	Almeida, A. (2012). On the structure of Sidel'nikov sequences for Pythagorean primes. Conference Proceedings of the International Symposium on Signals, Systems and Electronics. https://doi.org/10.1109/ISSSE.2012.6374333
12	Almeida, A. (2007). Frame synchronization using frequency domain processing for spread-spectrum systems. The Sixth IASTED International Conference on Communications, Internet, and Information Technology (pp. 102?105). ACTA Press. - Times Cited Web of Science®: 1
13	Almeida, A. P., Dinis, R. & Cercas, F. B. (2007). An FFT-based acquisition scheme for DS-CDMA systems. In Miyanaga, Y. (Ed.), 2007 International Symposium on Communications and Information Technologies (pp. 905?910). IEEE. https://doi.org/10.1109/ISCIT.2007.4392144 - Times Cited Web of Science®: 3 - Times Cited Scopus: 2 - Times Cited Google Scholar: 3
14	Almeida, A. (2007). Flexible Synchronization and Decoding for TCH Sequences with Variable Length. IEEE/IEE ISCTA'07, Ambleside - UK. - Times Cited Google Scholar: 3
15	Almeida, A. (2005). Synchronization with TCH codes. Proc Wireless Personal Multimedia Communications Symp. - WPMC (pp. 998?1002). - Times Cited Google Scholar: 6

- Talk

1	Almeida, A. (2012). Generalized TCH codes via Zech logs. Conference Proceedings of the International Symposium on Signals, Systems and Electronics,.
2	Almeida, A. (2012). On the structure of Sidel'nikov sequences for Pythagorean primes. Conference Proceedings of the International Symposium on Signals, Systems and Electronics,.
3	Almeida, A. (2011). On the use of TCH codes in ultrawide band systems. Proceedings of the 8th IASTED International Conference on Signal Processing, Pattern Recognition, and Applications, SPPRA 2011,.
4	Almeida, A. (2007). Frame synchronization using frequency domain processing for spread-spectrum systems. Proceedings of the Sixth IASTED International Conference on Communications, Internet, and Information Technology, CIIT 2007,.
5	Almeida, A. (2007). An FFT-based acquisition scheme for DS-CDMA systems. ISCIT 2007 - 2007 International Symposium on Communications and Information Technologies Proceedings,. - Times Cited Web of Science®: 1
6	Almeida, A., Cercas, F. & R. Dinis (2007). Flexible Synchronization and Decoding for TCH Sequences with Variable Length. ISCTA, Ambleside,. - Times Cited Google Scholar: 3

7	Almeida, A. & Franca, J. (1994). Digitally-programmable analog cells for artificial neural networks. Custom Integrated Circuits Conference - CICC,. https://doi.org/10.1109/CICC.1994.379658
8	Almeida, A. & Franca, J. (1993). A mixed-mode Architecture for Implementation of Analog Neural Networks with Digital Programmability. International Joint Conference on Neural Networks — IJCNN'93,. - Times Cited Web of Science®: 4 - Times Cited Google Scholar: 13

• Other Publications

- Entries/Forewords/Afterwords

1	Pintassilgo, S., Almeida, A., Nunes, A. C., Soares, H., Correia, I., Costa, P....Alvito, M. (2025). Prefácio. Novos Exemplos de práticas pedagógicas e estratégias de inovação pedagógica no Iscte,, 5?6.

- Other publications

1	Correia, C., Martins, V., Santana, P., Mariano, P., Almeida, A., Baptista, P....Almeida, S.M. (2019). ExpoLIS – An air quality exposure sensing system aiming to change the way people move in cities. In Proceedings of the 2019 7th Iberian Meeting on Aerosol Science and Technology,.

Research Projects

Project Title	Role in Project	Partners	Period
Avaliação da exposição humana à poluição atmosférica para alterar o modo de deslocação da população nas cidades	Researcher	IT-Iscte, IST - Leader (Portugal)	2018 - 2021
Broadcasting and Multicasting Over Enhanced UMTS Mobile Broadband Networks	Researcher	IT-Iscte, PTIN - Leader (Portugal)	2004 - 2006

Academic Management Positions

Vice-Presidente (2023 - 2025)
Unit/Area: Conselho Pedagógico

Membro (Docente) (2023 - 2025)
Unit/Area: Plenário do Conselho Pedagógico

Membro (2023 - 2025)
Unit/Area: Comissão Permanente do Conselho Pedagógico

Membro (Docente) (2023 - 2025)
Unit/Area: Comissão Pedagógica

Membro (Docente) (2021 - 2023)
Unit/Area: Comissão Permanente do Conselho Pedagógico

Membro (Docente) (2021 - 2023)
Unit/Area: Plenário do Conselho Pedagógico

Membro (Docente) (2021 - 2023)
Unit/Area: Comissão Pedagógica

Coordenador do 1º Ano (2021 - 2023)
Unit/Area: Bachelor Degree in Computer Science and Business Management

Coordenador do 1º Ano (2021 - 2023)
Unit/Area: Bachelor Degree in Computer Science and Business Management (PL)

Membro (Docente) (2019 - 2021)
Unit/Area: Plenário do Conselho Pedagógico