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## André Filipe Xavier da Glória

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Department of Applied Digital Technologies (SINTRA)

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## Research Interests

Internet of Things

Inteligencia Artificial

Smart Cities

Machine Learning

Hardware

## Academic Qualifications

University/Institution	Type	Degree	Period
ISCTE-Instituto Universitario de Lisboa	PhD	Ciências e Tecnologias da Informação	2021

ISCTE-IUL	M.Sc.	Engenharia Telecomunicações e Informática	2017
ISCTE - IUL	Licenciante	Engenharia de Telecomunicações e Informática	2016

## Teaching Activities

Teaching Year	Sem.	Course Name	Degree(s)	Coord
2024/2025	2º	Development of Technology-Based Project	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Science and Business Management;	No
2024/2025	2º	Entrepreneurship and Innovation IV	Institutional Degree in School of Applied Technologies (Iscte-Sintra);	No
2024/2025	1º	Conception and Viability of Technology-Based Project	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Science and Business Management;	No
2024/2025	1º	Entrepreneurship and Innovation III	Bachelor Degree in Digital Technologies and Management;	No
2023/2024	2º	Development of Technology-Based Project	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Science and Business Management;	No
2023/2024	1º	Conception and Viability of Technology-Based Project	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Science and Business Management;	No
2023/2024	1º	Object Oriented Programming	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2022/2023	2º	Development of Technology-Based Project	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Science and Business Management;	No
2022/2023	1º	Conception and Viability of Technology-Based Project	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Science and Business Management;	No
2021/2022	2º	Development of Technology-Based Project	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Science and Business Management;	No
2021/2022	1º	Conception and Viability of Technology-Based Project	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Science and Business Management;	No

2020/2021	2°	Development of Technology-Based Project	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Science and Business Management;	No
2020/2021	1°	Conception and Viability of Technology-Based Project	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Science and Business Management;	No
2016/2017	1°	Artificial Intelligence	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2016/2017	1°	Artificial Intelligence	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2016/2017	1°	Artificial Intelligence	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2016/2017	1°	Artificial Intelligence	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No
2015/2016	1°	Artificial Intelligence	Bachelor Degree in Computer Science and Business Management (PL); Bachelor Degree in Computer Engineering (PL); Bachelor Degree in Computer Engineering; Bachelor Degree in Telecommunications and Computer Engineering (PL); Bachelor Degree in Computer Science and Business Management; Bachelor Degree in Telecommunications and Computer Engineering;	No

## Supervisions

- **M.Sc. Dissertations**
- **Concluded**

	Student Name	Title/Topic	Language	Institution	Concluding Year
1	Francisco José dos Santos Negrier Raimundo	Improve Irrigation Sustainability using Machine Learning	Portuguese	ISCTE-IUL	2021
2	Beatriz Carolina Duque Dias	Heterogeneous Communication Scheme for IoT Smart Nodes	English	ISCTE-IUL	2021
3	Maria Inês Soares de Matos dos Santos Pires	Intelligent rainwater reuse system for irrigation	English	ISCTE-IUL	2020
4	João Miguel de Jesus Alves Coelho	Machine Learning for precise water leaks detection	English	ISCTE-IUL	2020
5	João Miguel Botas Cardoso	SmartFarm: Improve Sustainability using Wireless Sensor Networks	English	ISCTE-IUL	2020

## Total Citations

Web of Science®	127
Scopus	266

## Publications

### • Scientific Journals

#### - Scientific journal paper

1	<p>Glória, A. &amp; Sebastião, P. (2021). Autonomous configuration of communication systems for IoT smart nodes supported by machine learning. IEEE Access. 9, 75021-75034</p> <ul style="list-style-type: none"> <li>- Times Cited Web of Science®: 6</li> <li>- Times Cited Scopus: 9</li> <li>- Times Cited Google Scholar: 10</li> </ul>
2	<p>Glória, A., Cardoso, J. &amp; Sebastião, P. (2021). Sustainable irrigation system for farming supported by machine learning and real-time sensor data. Sensors. 21 (9)</p> <ul style="list-style-type: none"> <li>- Times Cited Web of Science®: 16</li> <li>- Times Cited Scopus: 26</li> <li>- Times Cited Google Scholar: 44</li> </ul>
3	<p>Glória, A., Dionisio, C., Simões, G., Cardoso, J. &amp; Sebastião, P. (2020). Water management for sustainable irrigation systems using Internet-of-Things. Sensors. 20 (5)</p> <ul style="list-style-type: none"> <li>- Times Cited Web of Science®: 26</li> <li>- Times Cited Scopus: 41</li> <li>- Times Cited Google Scholar: 67</li> </ul>

4	<p>Coelho, J. A., Glória, A. &amp; Sebastião, P. (2020). Precise water leak detection using machine learning and real-time sensor data. <i>IoT</i>. 1 (2), 474-493</p> <ul style="list-style-type: none"> <li>- Times Cited Web of Science®: 22</li> <li>- Times Cited Scopus: 33</li> <li>- Times Cited Google Scholar: 54</li> </ul>
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## • Conferences/Workshops and Talks

### - Publication in conference proceedings

1	<p>Dias, B., Glória, A. &amp; Sebastião, P. (2021). Prediction of link quality for IoT cloud communications supported by machine learning. In Paul R. (Ed.), 2021 IEEE World AI IoT Congress (AllIoT) . (pp. 150-154). Seattle, WA, USA: IEEE.</p> <ul style="list-style-type: none"> <li>- Times Cited Web of Science®: 1</li> <li>- Times Cited Scopus: 1</li> <li>- Times Cited Google Scholar: 2</li> </ul>
2	<p>Raimundo, F., Glória, A. &amp; Sebastião, P. (2021). Prediction of weather forecast for smart agriculture supported by machine learning. In Paul R. (Ed.), 2021 IEEE World AI IoT Congress (AllIoT). (pp. 160-164). Seattle, WA, USA: IEEE.</p> <ul style="list-style-type: none"> <li>- Times Cited Web of Science®: 4</li> <li>- Times Cited Scopus: 6</li> <li>- Times Cited Google Scholar: 12</li> </ul>
3	<p>Cardoso, J., Glória, A. &amp; Sebastião, P. (2020). Improve irrigation timing decision for agriculture using real time data and machine learning. In 2020 International Conference on Data Analytics for Business and Industry: Way Towards a Sustainable Economy (ICDABI). Sakheer, Bahrain: IEEE.</p> <ul style="list-style-type: none"> <li>- Times Cited Scopus: 19</li> <li>- Times Cited Google Scholar: 27</li> </ul>
4	<p>Cardoso, J., Glória, A. &amp; Sebastião, P. (2020). A methodology for sustainable farming irrigation using WSN, NB-IoT and machine learning. In 2020 5th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM). Corfu: IEEE.</p> <ul style="list-style-type: none"> <li>- Times Cited Scopus: 7</li> <li>- Times Cited Google Scholar: 9</li> </ul>
5	<p>Glória, A., João Cardoso &amp; Sebastião, P. (2020). Improve energy efficiency of irrigation systems using smartgrid and random forest. In 2020 5th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM). Corfu: IEEE.</p> <ul style="list-style-type: none"> <li>- Times Cited Scopus: 1</li> </ul>
6	<p>Dionísio, C., Simões, G., Glória, A., Sebastião, P. &amp; Souto, N. (2019). Distributed sensing solution for home efficiency tracking. In 2019 IEEE 5th World Forum on Internet of Things (WF-IoT). (pp. 825-828). Limerick, Ireland: IEEE.</p> <ul style="list-style-type: none"> <li>- Times Cited Web of Science®: 1</li> <li>- Times Cited Scopus: 2</li> <li>- Times Cited Google Scholar: 3</li> </ul>
7	<p>Gonçalo Simões, Dionísio, C., Glória, A., Sebastião, P. &amp; Souto, N. (2019). Smart system for monitoring and control of swimming pools. In 2019 IEEE 5th World Forum on Internet of Things (WF-IoT). (pp. 829-832). Limerick, Ireland: IEEE.</p> <ul style="list-style-type: none"> <li>- Times Cited Web of Science®: 6</li> <li>- Times Cited Scopus: 18</li> <li>- Times Cited Google Scholar: 19</li> </ul>

8	<p>Glória, A., Dionísio, C., Simões, G., Sebastião, P. &amp; Souto, N. (2019). WSN application for sustainable water management in irrigation systems. In 2019 IEEE 5th World Forum on Internet of Things (WF-IoT). (pp. 833-836). Limerick, Ireland: IEEE.</p> <p>- Times Cited Web of Science®: 8  - Times Cited Scopus: 12  - Times Cited Google Scholar: 20</p>
9	<p>Glória, A., Dionísio, C., Simões, G. &amp; Sebastião, P. (2019). LoRa transmission power self configuration for low power end devices. In 2019 22nd International Symposium on Wireless Personal Multimedia Communications (WPMC). Lisbon, Portugal: IEEE.</p> <p>- Times Cited Web of Science®: 2  - Times Cited Scopus: 6  - Times Cited Google Scholar: 10</p>
10	<p>Glória, A. &amp; Sebastião, P. (2019). Temperature distribution analyses with wireless sensor networks and machine learning. In 2019 International Conference on Sensing and Instrumentation in IoT Era (ISSI). Lisbon, Portugal: IEEE.</p> <p>- Times Cited Scopus: 1  - Times Cited Google Scholar: 2</p>
11	<p>Glória, A., Cercas, F. &amp; Souto, N. (2017). Design and implementation of an IoT gateway to create smart environments. In Procedia Computer Science (Ed.), Procedia Computer Science. (pp. 568-575): Elsevier.</p> <p>- Times Cited Web of Science®: 35  - Times Cited Scopus: 51  - Times Cited Google Scholar: 97</p>
12	<p>Glória, A., Cercas, F. &amp; Souto, N. (2017). Comparison of communication protocols for low cost Internet of Things devices. In South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference, SEEDA-CECNSM 2017. Kastoria: IEEE.</p> <p>- Times Cited Scopus: 33  - Times Cited Google Scholar: 65</p>

## • Other Publications

### - Master's Dissertation

1	<p>Glória, A. (2017). The use of Sensor Networks to create smart environments.</p>
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## Organization/Coordination of Events

Type of Organization/Coordination	Event Title	Organizer	Year
Member of scientific event committee	The 22rd International Symposium on Wireless Personal Multimedia Communications (WPMC'19)	ISCTE-IUL	2019
Member of scientific event's organizing committee	2nd International Symposium on Sensors and Instrumentation in IoT Era (ISSI'19)	ISCTE-IUL	2019
Coordination of non-scientific event	FISTA'19	ISCTE-IUL	2019
Coordination of non-scientific event	FISTA'18	ISCTE-IUL	2018

Coordination of non-scientific event	FISTA'17	ISCTE-IUL	2017
Member of non-scientific event's organizing committee	FISTA'16	ISCTE-IUL	2016