

José Quevedo

Senior Researcher @TN-Av, ITAV;
5GAIner Operational Manager @ITAV;
PhD in Telecommunications

Aveiro, Portugal
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Education and experience

- 2012-2020 **PhD in Telecommunications**
Thesis: “Enhancing Information-Centric Networking for a name-based Internet of Things”
MAP-tele Doctoral Programme, Universities of Minho, Aveiro and Porto, Portugal
Advisors: Dr. Daniel Corujo and Prof. Dr. Rui L. Aguiar
- 2010-2011 **Postgraduate Courses**
Attended to twenty postgraduate courses as part of the Master Programme:
“Telecommunication Systems”
Technological University of Havana “José Antonio Echeverría”, Havana, Cuba
- 2004-2009 **Telecommunications and Electronics Engineer**
Dissertation: “Analysis of the behaviour of MLP networks for intrusion detection in data networks”
Technological University of Havana “José Antonio Echeverría”, Havana, Cuba
Advisors: Prof. Dr. Walter Baluja García

Professional experience

- 2020- **Operational Manager**
Portugal 5G+IA Networks Reliability Center (5GAIner), Aveiro, Portugal
- 2020- **Senior Researcher**
Instituto de Telecomunicações, Aveiro, Portugal
- 2020-2021 **Invited Adjunct Professor**
Escola Superior de Tecnologia e Gestão de Águeda, Águeda, Portugal
- 2018-2020 **Invited Assistant Professor**
Escola Superior de Tecnologia e Gestão de Águeda, Águeda, Portugal
- 2012-2020 **Researcher**
Instituto de Telecomunicações, Aveiro, Portugal
- 2011 **Junior Professor**
Technological University of Havana “José Antonio Echeverría”, Havana, Cuba
- 2009-2010 **Administrator of the University Network: Information Security Officer**
Technological University of Havana “José Antonio Echeverría”, Havana, Cuba

Teaching experience

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| 2020-2021 | Invited Adjunct Professor Escola Superior de Tecnologia e Gestão de Águeda, Águeda, Portugal |
| 2018-2020 | Invited Assistant Professor Escola Superior de Tecnologia e Gestão de Águeda, Águeda, Portugal |
| 2011 | Junior Professor Technological University of Havana “José Antonio Echeverría”, Havana, Cuba |
| 2011 | Invited Lecturer Cuban Society for Telecommunications (CubaTel Inc.), Havana, Cuba |
| 2007-2009 | Undergraduate Teaching Assistant Technological University of Havana “José Antonio Echeverría”, Havana, Cuba |

Selected scientific & technological production

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| Book Chapters | B1. D. Corujo, C. Guimarães, J. Quevedo, R. Ferreira, and R. L. Aguiar, “Information Centric Exchange Mechanisms for IoT Interoperable Deployment,” in User-Centric and Information-Centric Networking and Services: Access Networks and Emerging Trends, M. Krishna, Ed. Taylor & Francis Group, 2019, ch. 3, pp. 71,140 (Scholar: 1/ Scopus: -/ WoS: -) |
| International Conferences | <p>C1. A. Radwan, Hao Ran Chi, D. Corujo, J. Quevedo, R. Silva, D. Santos, R. L. Aguiar, O. Abboud and A. Hecker “Trust-Aware Multi-Criteria-Modeled Live Service Migration for Heterogeneous Edge Computing”, Global Communications Conference (Globecom 2022)</p> <p>C2. M. Antunes, J. Quevedo, D. Gomes and R. L. Aguiar, “Improve Contextual IoT service discovery with semantic models”, 9th International Conference on Future Internet of Things and Cloud (FiCloud 2022)</p> <p>C3. A. Santos, J. Quevedo, D. Corujo, “Realizing Zenoh with programmable dataplanes”, in 4th P4 Workshop in Europe (EuroP4), December 2021</p> <p>C4. J. Fonseca, J. Alegria, V. Cunha, J. Quevedo, D. Santos, D. Gomes, J. P. Barraca, D. Corujo, R. L. Aguiar, “Dynamic Interdomain Network Slicing for Verticals in the 5Growth Project,” in 4th Mobility Support in Slice-based Network Control for Heterogeneous Environments (Mobislice), November 2021</p> <p>C5. Guimarães, J. Quevedo, R. Ferreira, D. Corujo, and R. L. Aguiar, “Content Retrieval While Moving Across IP and NDN Network Architectures,” in 2019 IEEE Symposium on Computers and Communications (ISCC), June 2019</p> <p>C6. J. Quevedo, C. Guimarães, R. Ferreira, A. Sepas-Moghaddam, L. Malhadas, R. L. Aguiar, P. L. Correia, and D. Corujo, “Selectively Accessing Light Field Face Images over Information Centric Networking,”</p> |

in 2018 9th IFIP International Conference on New Technologies, Mobility and Security (NTMS), Feb 2018, pp. 1–5

- C7. J. Quevedo, D. Corujo, and R. L. Aguiar, “A case for ICN usage in IoT environments,” in Global Communications Conference (GLOBECOM), 2014 IEEE, Dec 2014, pp. 2770–2775
- C8. J. Quevedo, D. Corujo, and R. L. Aguiar, “Consumer driven information freshness approach for content centric networking,” in Computer Communications Workshops (INFOCOM WKSHPS), 2014 IEEE Conference on, April 2014, pp. 482–487
- International Journals
- J1. C. Guimarães, J. Quevedo, R. Ferreira, D. Corujo, and R. L. Aguiar, “Exploring interoperability assessment for Future Internet Architectures roll out,” *Journal of Network and Computer Applications*, 2019
- J2. J. Quevedo, R. Ferreira, C. Guimarães, R. L. Aguiar, and D. Corujo, “Internet of Things discovery in interoperable Information Centric and IP networks,” *Internet Technology Letters*, vol. 1, no. 1, pp. 1–6, 2017
- J3. J. Quevedo, C. Guimarães, R. Ferreira, D. Corujo, and R. L. Aguiar, “ICN as Network Infrastructure for Multi-Sensory Devices: Local Domain Service Discovery for ICN-based IoT Environments,” *Wireless Personal Communications*, vol. 95, no. 1, pp. 7–26, Jul 2017
- J4. J. Quevedo, M. Antunes, D. Corujo, D. Gomes, and R. L. Aguiar, “On the application of contextual IoT service discovery in Information Centric Networks,” *Computer Communications*, vol. 89–90, pp. 117 – 127, 2016
- J5. M. Amadeo, C. Campolo, J. Quevedo, D. Corujo, A. Molinaro, A. Iera, R. L. Aguiar, and A. V. Vasilakos, “Information-centric networking for the internet of things: challenges and opportunities,” *IEEE Network*, vol. 30, no. 2, pp. 92–100, March 2016
- J6. J. Suarez, J. Quevedo, I. Vidal, D. Corujo, J. Garcia-Reinoso, and R. L. Aguiar, “A secure IoT management architecture based on Information-Centric Networking,” *Journal of Network and Computer Applications*, vol. 63, pp. 190 – 204, 2016
- National Conferences
- N1. J. Quevedo and R. L. Aguiar, “Testing Performance of MLP Neural Networks for Intrusion Detection with MATLAB,” in 13 Conferência sobre Redes de Computadores (CRC), Leiria, Portugal, November 2013
- N2. F. Teixeira, J. Quevedo, R. Campos, and M. Ricardo, “Performance Evaluation of IEEE 802.11 Underwater Wireless Networks,” in 13 Conferência sobre Redes de Computadores (CRC), Leiria, Portugal, November 2013
- National Journals
- N3. W. Baluja, J. Quevedo, and Y. Fernández, “Detección de Intrusiones en Redes Inalámbricas,” *Revista Telem@tica*, vol. VIII, no. 16, 2009

Selected Research Projects

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| 2021- | Joint Computing Networking Optimization (JoCoNet) Instituto de Telecomunicações, Aveiro, Portugal |
| 2021- | 5G Application & Services experimentation and certification Platform (H2020-5GASP) Instituto de Telecomunicações, Aveiro, Portugal |
| 2020- | Portugal 5G+IA Networks Reliability Center (5GAIner) Instituto de Telecomunicações, Aveiro, Portugal |
| 2020- | Augmented Humanity (Augmanity) Instituto de Telecomunicações, Aveiro, Portugal |
| 2019-2022 | 5G-enabled Growth in Vertical Industries (H2020-5GROWTH) Instituto de Telecomunicações, Aveiro, Portugal |
| 2020-2021 | 5G Mobilizer (5GO.pt) Instituto de Telecomunicações, Aveiro, Portugal |
| 2020 | Next Generation Software Defined Networking for Fixed and Wireless Broadband Access (P4NG) Instituto de Telecomunicações, Aveiro, Portugal |
| 2017-2018 | Selectively Accessing Light Field Faces over Information-Centric Networking (SeLF-ICN) Instituto de Telecomunicações, Aveiro, Portugal |

Knowledge extension and dissemination activities

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| Event Organization | <ul style="list-style-type: none"> ▪ International Symposium on 6G Networking (6G Summit), Lisbon, Portugal, November 2021 (Organization Committee) ▪ 3rd Visions for Future Communications Summit, Lisbon: "Strengthening the Path Towards 6G", Portugal, November 2021 (Organization Committee) ▪ Smart Networks and Services Task Force Meeting, Lisbon, Portugal, November 2021 (Organization Committee) ▪ 30º Seminário da Rede Temática de Comunicações Móveis (RTCM), July 2021, Online Event (Organization Committee) ▪ Networld2020 Expert Group and Steering Board meeting, Lisbon, Portugal, November 2019 (Organization Committee) ▪ 2nd Visions for Future Communications Summit: "Technologies and Services Towards 6G", Lisbon, Portugal, November 2019 (Organization Committee) |
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- Smart Networks and Services Task Force Meeting, Lisbon, Portugal, November 2019 (Organization Committee)
 - Visions for Future Communications Summit, Lisbon, Portugal, October 2017 (Organization Committee)
 - Network2020 General Assembly, Lisbon, Portugal, October 2017 (Organization Committee)
 - 9th ACM Workshop on Mobility in the Evolving Internet Architecture (MobiArch), Maui, Hawaii, USA, September 2014 (Web Chair)
 - 19th IEEE Symposium on Computers and Communications (ISCC), Madeira, Portugal, June 2014 (Organizational Activities)
 - Doctoral Symposium in Informatics Engineering (DSIE'13), Porto, Portugal, January 2013 (Scientific Committee)
- Technical Programme Committee
- 5th edition of Mobility Support in Slice-based Network Control for Heterogeneous Environments (Mobislice 2022)
 - 2nd IFIP/IEEE International workshop on Fully-Flexible Internet Architectures and Protocols for the Next-Generation Tactile Internet (FlexNGIA 2022)
 - 1st IFIP/IEEE International workshop on Fully-Flexible Internet Architectures and Protocols for the Next-Generation Tactile Internet (FlexNGIA 2021)
 - 4th edition of Mobility Support in Slice-based Network Control for Heterogeneous Environments (Mobislice 2021)
- Review Services
- Reviewer for international conferences, workshops and journals. Namely, ISCC, MobiArch, Mobislice, IEEE IoT Journal, Elsevier COMCOM, Elsevier JCNA, Wiley ITL, IEEE Access, ETT, and FlexNGIA.
- Open Source Contributions
- Contributor to open-source software (e.g., ndnSIM, ndn-cxx, ndn-cpp, CCNx)
- Open Source Projects
- A P4 Implementation of the Zenoh Protocol (<https://github.com/ATNoG/zenoh-p4>)
 - A Framework for Interoperable Future Internet Architectures (<https://github.com/ATNoG/FIXP>)