

Overview

1. Personal data

Full Name

Luís Manuel Cerqueira Barreto

Name under which you publish

Luís Manuel Cerqueira Barreto

Fiscal ID number

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Birth date

30-11-1972

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Portugal

Gender

M

Work address

Escola Superior de Ciências Empresariais do Instituto Politécnico de Viana do Castelo / Business Sciences School- Polytechnic Institute of Viana do Castelo
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2. Academic degrees

Year: 2005

Degree: MESTRADO

Final grade: A / Muito Bom

Degree granting institution Universidade do Porto

School/College/Campus Faculdade de Ciências

Thesis title Security in network architectures for wireless access/ Segurança em arquitecturas de rede para acessos sem fios

Supervisor: Susana Sargento

Co-supervisor: Luís Filipe Antunes

Scientific area Informática

Number of curricular years 2

Program title MSc in Informatics - Systems and Networks Branch/ Mestrado em Informática - Ramo de Sistemas e Redes

Year: 1995

Degree: LICENCIATURA

Final grade: 12

Degree granting institution Universidade do Porto

School/College/Campus Faculdade de Engenharia

Thesis title Electrical and Computer Engineering - Telecommunications and Computers Branch / Engenharia Electrotécnica e de Computadores- Ramo telecomunicações e Computadores

Supervisor:

Co-supervisor:

Scientific area Telecomunicações e Computadores

Number of curricular years 5

Program title Electrical and Computer Engineering - Telecommunications and Computers Branch / Engenharia Electrotécnica e de Computadores- Ramo telecomunicações e Computadores

Year: 2012

Degree: DOUTORAMENTO

Final grade: Aprovado por Unanimidade

Degree granting institution Universidade de Aveiro

School/College/Campus Other

Thesis title Controlo de Congestionamento em Redes Sem Fios / Wireless Networks Congestion Control

Supervisor: Susana Miranda Barreto Sargento

Co-supervisor:

Scientific area Engenharia Electrotécnica

Program title Programa Doutoral em Engenharia Electrotécnica

3. Previous activity and current status

Período	Cargo, categoria ou actividade	Instituição
18-4-2018 a	Membro do Conselho Técnico-Científico/Technical-Scientific Council Member	Instituto Politécnico de Viana do Castelo-Escola Superior de Ciências Empresariais/Polytechnic Institute of Viana do Castelo - Business Sciences School
04-5-2011 a	Membro do Conselho Académico/Academic Council Member	Instituto Politécnico de Viana do Castelo-Escola Superior de Ciências Empresariais/Polytechnic Institute of Viana do Castelo - Business Sciences School
01-1-2014 a 30-1-2018	Membro do Conselho Pedagógico/ Pedagogical Council Member	Instituto Politécnico de Viana do Castelo-Escola Superior de Ciências Empresariais/Polytechnic Institute of Viana do Castelo - Business Sciences School
01-4-1998 a 27-2-1999	Maintenance Manager - responsible for the management and maintenance of computer services and equipment	TONOVA (St Merryr Meat)
01-3-1999 a 28-2-2003	Engenheiro Técnico de Telecomunicações/Telecommunications Technical Engineer	Década Informática
01-3-2003 a 31-8-2004	Technical Coordinator - Coordination of the technical area of management, configuration, support and maintenance at the level of systems and equipment of network/telecommunications of the North region of the country.	Década Informática - Stirtan
16-9-2006 a 16-9-2012	Scientific Coordinator of the areas of Systems and Networks and Computer Science, responsible for the verification and analysis of the syllabus of the subjects of the mentioned areas.	Instituto Politécnico de Viana do Castelo-Escola Superior de Ciências Empresariais/Polytechnic Institute of Viana do Castelo - Business Sciences School
27-10-2004 a 12-11-2009	Coordinator of the Management Informatics Course, responsible for the management and technical-pedagogical organization of the Management Informatics course	Instituto Politécnico de Viana do Castelo-Escola Superior de Ciências Empresariais/Polytechnic Institute of Viana do Castelo - Business Sciences School
01-5-2007 a	Prof. Adjunto	Instituto Politécnico de Viana do Castelo-Escola Superior de Ciências Empresariais/Polytechnic Institute of Viana do Castelo - Business Sciences School
16-9-2005 a 31-5-2006	Equiparado a Prof. Adjunto	Instituto Politécnico de Viana do Castelo-Escola Superior de Ciências Empresariais/Polytechnic Institute of Viana do Castelo - Business Sciences School
01-10-2001 a	Responsible for the Management, Maintenance and Configuration of the Computer Network. Manager of the Information Systems Management Process.	Instituto Politécnico de Viana do Castelo-Escola Superior de Ciências Empresariais/Polytechnic Institute of Viana do Castelo - Business Sciences School
24-1-	Membro do Conselho Pedagógico/Pedagogical Council Member	Instituto Politécnico de Viana do Castelo-

2003 a
31-1-
2010

09-2-
2006 a Subdiretor da Direção/Subdirector of the Direction Board

Escola Superior de Ciências Empresariais/
Polytechnic Institute of Viana do Castelo -
Business Sciences School

Instituto Politécnico de Viana do Castelo-
Escola Superior de Ciências Empresariais/
Polytechnic Institute of Viana do Castelo -
Business Sciences School

4. Area of scientific activity

Definition of new congestion protocols in networks, network security, ad-hoc networks, wireless networks, mesh networks, development of new contents for distance training, accessible content, network simulation. Processes at industry level 4.0, particularly in terms of safety and logistics processes.

5. Present research interest

Domain of specialization

Network security, Wireless networks, ad-hoc networks, network congestion protocols. IoT, industry 4.0, cybersecurity

Current research interests

Congestion protocols in wireless networks, E-learning, mesh networks, network protocols simulators.

Other professional interests/activities

Coordination of research projects

6. Experience as scientific adviser

Master Thesis (Co-advisor): Cristina Maria Lourenço Ferreira Noversa, "Especificação de um Modelo de Desburocratização no Ensino: Estudo de Caso", 2012, Instituto Politécnico de Viana do Castelo;
Master Thesis (Main advisor): Nuno Miguel Pereira Soares, "Short Sea como alternativa ao Transporte Terrestre", 2014, Politécnico do Porto;
Master Thesis (Main advisor): Ana Rita Silva Gonzaga Grego, "Gestão de Stocks e Armazém de Matérias-Primas.", 2013, Politécnico do Porto;
Master Thesis (Main advisor): Rita Amorim Petiz, "Reestruturação operacional de um armazém logístico", 2013, Politécnico do Porto;
Master Thesis (Main advisor): Nuno Miguel Vieira Santos Pereira, "A Gestão da Logística Inversa na Reciclagem de Equipamentos Elétricos e Eletrónicos", 2015, Politécnico do Porto;
Master Thesis (Main advisor): Sílvia Ribeiro Mateus, "Logística Verde E A Responsabilidade Social Das Empresas", 2016, Politécnico do Porto;
Master Thesis (Main advisor): Gustavo Miguel Barroco Machado Pereira, "Transporte intermodal rodo-ferroviário em sistema ro-ro: uma opção inteligente", 2017, Politécnico do Porto;
Arguing in the public defense of the Master's Thesis "Análise comportamental sobre ataques de engenharia social", 2015, Jana Eça Hohlenwerger Muniz Gaspar, Mestrado em Engenharia Informática, Escola Superior de Tecnologia e Gestão de Felgueiras, Politécnico do Porto.

7. Participation in R&D projects

Participação em projectos de investigação (coordenador/membro de equipas)

Participation as coordinator in the following Research Projects (R & D):
2017- Alto Minho. SMOB (02/SAICT/2016) - Project Research Coordinator.
2017 -REVITAGRI (NORTE-02-0853-FEDER-000120) - Member of the Research Team.
2009 I - CAMPUS (LLP-LDV-TOI-09-IT-0451)- Member of the Research Team.
2007 SEELE - Seeking Learning Evaluation (LLP-LDV/TOI/2007/PT/06)- Project Research Coordinator.
2004 NetStart (2004/EQUAL/A2/AD/210)- Project Research Coordinator.
CSI - Cooperation and Serving Innovation (Cooperação ao Serviço da Inovação)- (CSI - <http://csi.ipvc.pt>)- Project Research Coordinator.

Participation as a researcher in the Vale do Minho Digital project.
Coordinator in the development of the IPVC virtual campus project.

8. Prizes and awards received

Year	Name of the prize or award	Promoting entity
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9. Published works

Teses

MASTER THESIS: Luís Barreto, "Segurança em Arquiteturas de Rede para Acesso sem Fios", 2005, Faculdade de Ciências da Universidade do Porto;

PhD THESIS: Luís Barreto, "Wireless networks congestion control/ Controlo de Congestionamento em Redes Sem Fios", 2012, Universidade de Aveiro

Baltazar, S., Amaral, A., & Barreto, L. (2018). Happiness, prosperity and quality of life: A relation towards future mobility. In 4th International Conference on Production Economics and Project Evaluation - ICOPEV 2018. Guimarães.

Capítulos de livros

Accessing an existing virtual electronic patient record with a secure wireless architecture, Ana Ferreira, Luís Barreto, Pedro Brandão, Ricardo Correia, Susana Sargento, Luís Antunes, Book: Mobile Health Solutions for Biomedical Applications

Barreto, L., Amaral, A. M., Pereira, T., & Carvalho, F. (2018). Development of a Framework for Technological Embedding in Private Social Solidarity Institutions: Technology for Inclusion in the Daily Activities of Third Sector Institutions - The Portuguese Case. In S. Paiva (Ed.), Mobile Applications and Solutions for Social Inclusion (pp. 83-108). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-5270-3.ch004

Baltazar S., Barreto L., Amaral A. (2019) Redefinition of Public Transport in the Alto Minho Region, Portugal - An Overview. In: Nathanail E., Karakikes I. (eds) Data Analytics: Paving the Way to Sustainable Urban Mobility. CSUM 2018. Advances in Intelligent Systems and Computing, vol 879. Springer, Cham

Artigos em revistas de circulação internacional com arbitragem científica

Luís Barreto, "Cross-Layer Information to Enhance TCP-AP Congestion Control in Wireless Networks, International Journal of Computers and Communications, NAUN, Vol. 10, 2016. ISSN: 2074-1294.

Luís Barreto, "TCP-AP Enhanced Behaviour With rt-WinF And Node Count: boosted-TCP-AP", Journal of Network Protocols and Algorithms, MacroThink Institute, vol. 7- 2015, Nº 2, 15 pages, 2015. doi: <http://dx.doi.org/10.5296/npa.v7i2.7677>. ISSN 1943-3581.

Luis Barreto, "XCP-WinF and RCP-WinF: Improving Explicit Wireless Congestion Control," Journal of Computer Networks and Communications, vol. 2015, Article ID 925207, 18 pages, 2015. doi:10.1155/2015/925207, <http://dx.doi.org/10.1155/2015/925207>.

Barreto Luis, Vilaça Alexandre, Viana Cláudia, "Netstart- Achieving new abilities with ICT", IEEE Multidisciplinary Engineering Education Magazine, IEEE Education Society, vol. 4, no. 1, pp 13-18, June, 2009, ISSN 1558-7908.

L. Barreto, A. Amaral, T. Pereira, Industry 4.0 implications in logistics: an overview, In Procedia Manufacturing, Volume 13, 2017, Pages 1245-1252, ISSN 2351-9789, <https://doi.org/10.1016/j.promfg.2017.09.045>. (<http://www.sciencedirect.com/science/article/pii/S2351978917306807>)

T. Pereira, L. Barreto, A. Amaral, Network and information security challenges within Industry 4.0 paradigm, In Procedia Manufacturing, Volume 13, 2017, Pages 1253-1260, ISSN 2351-9789, <https://doi.org/10.1016/j.promfg.2017.09.047>. (<http://www.sciencedirect.com/science/article/pii/S2351978917306820>)

Barreto, L. (2017). Advanced Wireless Congestion Control Techniques: XCP-WinF and RCP-WinF. WSEAS TRANSACTIONS ON COMMUNICATIONS, 16(2017), 232-254. Retrieved from <http://www.wseas.org/multimedia/journals/communications/2017/a565904-663.php>

Publicações em actas de encontros científicos

Ferreira A., Barreto Luis, Brandão P., Correia R., Sargento S., Antunes L., 2006, "A secure wireless architecture to access a virtual electronic patient record", PMHCS2006- Security and Privacy in Mobile Health Care, Pervasive Health Conference and Workshops, Innsbruck, Austria. ISBN 1-4244-1085-1.

Barreto L., Sargento S., 2005, "Avaliação do Desempenho de Sistemas de Segurança com Suporte de WPA", CRC2005, IPP, Portugal.

Barreto L., Sargento S., 2005, "Comparação do Desempenho entre Sistemas de Segurança com Suporte de WPA e IPsec", SINO2005, Covilhã, UBI, Portugal.

Barreto L., Vilaça A., Viana C., "Netstart- Achieving new abilities with ICT", iLearning Forum 2008, 4-5 Fevereiro 2008, Paris, França. <http://www.eife-l.org/publications/proceedings/ilf08/contributions/Supporting%20Lifelong%20Learning%20and%20Employability/Barreto.pdf>

Barreto L., Vilaça A., Viana C., "Netstart- Achieving new abilities with ICT", IMCL- Interactive Mobile and Computer Learning International Conference 2008, 16-18 Abril 2008, Princess Sumaya University, Amman, Jordânia. http://209.61.205.141/past_conf.shtm

L. Barreto and S. Sargento, "TCP, XCP and RCP in wireless mesh networks: An evaluation study." in 15th IEEE Symposium on Computers and Communications (IEEE ISCC10), Riccione, Italy, 6 2010.

B. Res, Luis Barreto, and S. Sargento, "rt-winf: Real time wireless inference mechanism," in IEEE Globecom 2010 Workshop on Mobile Computing and Emerging Communication Networks (MCECN 2010), Miami, Florida, USA. GLOBECOM Workshops (GC Wkshps), 2010 IEEE, Issue Date : 6-10 Dec. 2010, On page(s): 1130 - 1135, Print ISBN: 978-1-4244-8863-6, References Cited: 22, INSPEC Accession Number: 11774517, DOI: 10.1109/GLOCOMW.2010.5700111.

Luis Barreto and S. Sargento, "XCP-WinF and RCP-WinF: Congestion Control Techniques For Wireless Mesh Networks" in International Conference on Communications ICC2011 - Adhoc, Sensor and Mesh Networking Symposium 2011, Kyoto, Japan. ISSN: 1550-3607, E-ISBN: 978-1-61284-231-8, Print ISBN: 978-1-61284-232-5, INSPEC Accession Number: 12139245, DOI: 10.1109/icc.2011.5963464.

L. Barreto and S. Sargento, "How Real-time Bandwidth Inference Improves the Congestion Control in Wireless Mesh Networks." In Actas da 10 Conferência sobre Redes de Computadores (CRC'2010), Braga, Portugal, November 2010. http://crc2010.di.uminho.pt/crc2010_programa_sessao1.html#p1e

Ferreira A., Barreto Luis, Brandão P., Correia R., Sargento S., Antunes L., 2007, "A secure wireless architecture to access a virtual electronic patient record", IEEE Transactions on Information Technology in Biomedicine 2006.

Luis Barreto, "TCP-AP Wireless Enhanced Congestion Control" in 1st International Conference on Electrical Engineering and Applications 2014 (MIC-ELECTRICAL 2014), 4-6 April, Athens, Greece. ISSN: 2227-331X, ISBN: 978-1-938302-12-1.

Barreto, L., Amaral, A., Pereira, T. (2017). Industry 4.0 implications in logistics: an overview", 7th Manufacturing Engineering Society International Conference, Vigo, Spain, 28th-30th June (Accepted).

Pereira, T., Barreto, L., Amaral, A. (2017). Network and Information Security Challenges within Industry 4.0 Paradigm, 7th Manufacturing Engineering Society International Conference, Vigo, Spain, 8th-30th June (Accepted).

Baltazar, S., Barreto, L., & Amaral, A. (2018). Redefinition of public transport in the Alto Minho Region, Portugal - an Overview. In 4th Conference on Sustainable Urban Mobility (CSUM2018) (pp. 275-282). Skiathos: The Traffic, Transportation and Logistics Laboratory (TTLog).

Barreto, L., Amaral, A., & Baltazar, S. (2018). Mobility as a Service (MaaS) in rural regions: An overview. In 9th IEEE International Conference on Intelligent Systems 2018. Funchal: IEEE.

Barreto, L., Amaral, A., & Baltazar, S. (2018). Urban Mobility Digitalization: Towards Mobility as a Service (MaaS). In 9th IEEE International Conference on Intelligent Systems 2018. Funchal: IEEE.

Barreto, L., Amaral, A., & Baltazar, S. (2018). Smart Farming: Cyber Security Challenges. In 9th IEEE International Conference on Intelligent Systems 2018. Funchal: IEEE.

Baltazar, S., Amaral, A., & Barreto, L. (2018). Viana do Castelo' sustainable mobility indicators. In 4th International Conference on Production Economics and Project Evaluation - ICOPEV 2018. Guimarães.

Outras publicações

Barreto L., 01-02-2006, "A Informática Empresarial nas PME's", in Jornal "O Valenciano", Valença, Portugal.

Barreto L., 2005, "Segurança em redes sem fios", IPVC Academia, Viana do Castelo, IPVC, Portugal.

NetStart - Achieving new abilities with ICT, Luis Barreto, Alexandre Vilaça, Cláudia Viana, in PROLIX Research Open Workshop in n conjunction with the EC-TEL 2007 conference

Amaral, A., Cairrão, A., Barreto, L. (2016). A Avaliação da Dimensão Económica e do Branding de um Evento num Pequeno Município - O Caso Art Beer Fest", ISBN 978-989-20-6400-0.

10. Communications in scientific meetings

Comunicações orais por convite

"Avaliação do desempenho de Sistemas de Segurança com Suporte de WPA", CRC 2005, Portalegre

"Pirataria Informática", Gabigerh, Vila Nova de Cerveira

Participation as speaker, in the PROLIX Open Research Workshop, held jointly with the Conference EC-TEL 2007, where he presented the research development "Netstart- Achieving new abilities with ICT". Creta, Greece. 16 september 2007.

Participação, como orador, na Conferência Internacional iLearning Forum 2008, da responsabilidade da EIFEL, onde apresentou os resultados do trabalho de investigação "Netstart- Achieving new abilities with ICT". Paris, França. 4 e 5 de Fevereiro de 2008.

Conferência Internacional Interactive Mobile and Computer Learning - IMCL, organizada pelo IEEE, onde apresentou os resultados do trabalho de investigação "Netstart". Princess Sumaya University, Amman, Jordânia. 16 a 18 de Abril de 2008

The 2016 International Conference on Electronics and Communication Systems, Riga, Latvia, May 28-30, 2016. "Cross-Layer Information to Enhance TCP-AP Congestion Control in Wireless Networks"

11. Languages

Language	Reading	Writing	Conversation
English	Very good	Very good	Very good
French	Good	Basic	Good
Spanish	Very good	Very good	Very good

