

J. Antão B. Moura, Ph.D.
Curriculum Vitae

Revised January 2018

CONTENTS

SUMMARY	3
1. PERSONAL AND CONTACT INFORMATION	5
1.1. Personal Information	5
1.2. Contact Addresses	5
1.3. Link to CV at the Brazilian Research Council (CNPq)	5
2. EDUCATION	6
3. PROFESSIONAL EXPERIENCE	7
3.1. Regular Teaching	7
3.2. Sporadic Courses	7
3.3. Administrative Positions	8
3.4. Services for the Industry	9
4. RESEARCH AND DEVELOPMENT	11
4.1. Awards, Assignments & Scholarships	13
4.2. Participation in R&D Projects	13
4.4. Theses	15
4.4. Books and Book Chapters	15
4.5. Journal Papers (last 10 years)	16
4.6. Selected Papers in Peer-Reviewed Conferences (last 10 years)	17
4.7. Patents	20
5. PRODUCTION INDICATORS	21

em anexo, meu CV completo, em inglês, que planejo usar (após devido tratamento de design).

As tarjas **amarelas** indicam as seções que sugiro aproveitar para a página de ETI; os textos tarjados em **vermelha** indicam que não devem ser usados na página ETI, apesar de estarem dentro de uma seção tarjada em amarelo.

Você faria a gentileza de:

- 1) gerar um CV completo, com tratamento de design (tipo e tamanho de fonte; sem as tarjas - mas mantendo todas as seções; mais atraente e mais compacto - reduzindo espaço entrelinhas, p.ex.); e,
- 2) depois que fecharmos o novo design (layout), extrair material para o CV na página de ETI conforme tarjas no anexo.

Aguardo seus comentários e sugestão em 1) para avançarmos.

Grato e abs.,

SUMMARY



J. Antão B. Moura

antao@dsc.ufcg.edu.br

Phone: +55 (83) 99131 0636

Born in Vitória de Sto. Antão, PE, Brazil (1954).

Honorary citizen of Mt. Pleasant, MI, United States of America (1970).

PhD in Electrical Engineering (computer networks) at the University of Waterloo, Canada, (1982).

One of the founders and the first coordinator of the renowned Computer Networks Research Group (GRC) at UFPB in 1983. (GRC was for a period, responsible for close to 25% of the publications on computer networks in Brazil.)

Deputy Executive Director of the Brazilian Laboratory for Computer Networks (LARC). LARC preceded the Brazilian Research Network (RNP) – the national academic internet.

Entrepreneur, co-founded Infocon Software (later Light-Infocon Tecnologia S/A) in 1984, an MS-Windows and Unix software house whose products and management procedures received awards in Brazil, Spain and the USA.

Promoted to Full Professor of Computer Science at the Federal University of Paraíba (UFPB), Brazil, after ranking 1st place with overall average of 97.2% in a juried, public selection of candidates (1993).

Retired as Full Professor from UFPB and divested interest in Light-Infocon in 2000, to work with Information Technology companies and institutions in Brazil and internationally.

Returned to Academe in July 2002, after ranking 1st place with overall average of 90.5% in a juried, public selection of candidates for a Computer Science teaching & research (professor) position at the Federal University of Campina Grande (UFCG), Brazil.

Co-authored 8 books on computer networks and related technologies by McGraw-Hill in Brazil and in Spain (for Spanish-speaking markets); and, 3 book chapters on software engineering, IT management and serious, sustainable crowdsourcing games by Springer (Switzerland) and Springer-Verlag (Germany).

Research interests include distributed computing systems, software engineering, IT economics, and gamification of applications for the engagement of crowds in solutions to complex social problems.

(Co)Supervised over 40 theses, dissertations and end-of-course projects in PhD, MASc and other graduate programs at UFPB, UFCG and other universities in Brazil, Canada, China, England, Paraguay, Portugal, and the USA.

Published close to 200 articles on technical and business aspects of IT in trade or in reviewed magazines, journals and conferences in Brazil and abroad. Some recent papers appear in ACM and IEEE publications.

Consultant to the Brazilian Research Council (CNPq); the Brazilian Small Companies Service Bureau (SEBRAE); the United Nations Development Programme (UNDP); the Paraíba State Technology Park Foundation; and Hewlett-Packard.

Executive Director for External Trade of the Brazilian Software & IT Services Companies Association (ASSESPRO) (1995-1996). Executive Director of International Operations of the Brazilian Ministry of Science & Technology's (MCT's) SOFTEX Society (1997-1999).

Established and/or managed IT R&D and business partnerships with IT companies and institutions in Argentina, Australia, Canada, China, Germany, India, Italy, Israel, Mozambique, Portugal, Spain, and the USA.

Organized, secured funding and managed the participation of Brazilian IT companies in trade fairs in China (Beijing), Germany (Hannover) and the US (Las Vegas).

Shares life with Valéria – a fine arts painter and landscape designer – with their son and daughter, Otávio and Sofia, and more often, with their two grandkids, Sabrina and Otávio, in an area of the countryside they helped reforest in the misty and sometimes dry mountains of Northeastern Brazil.

1. PERSONAL AND CONTACT INFORMATION

1.1. Personal Information

José **Antão** Beltrão **Moura**, born February 10th, 1954, in the city of Vitória de Santo Antão, state of Pernambuco, Brazil.

Shares life with Valéria (born 1955), their two children, Otávio (1982) and Sofia (1984), and grandkids, Sabrina (2005) and Otávio (2008).

Honorary citizen of the city of Mt. Pleasant, Michigan, United States of America (1970).

Brazilian Passport: Number – FM 747625
 Date of issue – 13 MAR 2015
 Issuing authority – DPF/CGE/PB
 Valid through – 12 MAR 2020

Languages: Reads, speaks and writes in Portuguese and in English.
 Reads and speaks in Spanish.

1.2. Contact Addresses

e-mail: antao@dsc.ufcg.edu.br

Fone: +55 (83) 99131 0636

Professional address: Federal University of Campina Grande (UFCG)
 Systems and Computing Department (DSC)
 Av. Aprígio Velloso, 882
 Bloco CN, Sala 210
 58.429-140 – Campina Grande, PB, Brazil

Postal address: R. Dr. Gutemberg Uchoa de Araújo, 63
 Catolé
 58410-390 – Campina Grande, PB, Brazil

Home georeference: 7° 9' 49.32" South
 35° 49' 58.57" West

1.3. Link to CV at the Brazilian Research Council (CNPq)

<http://lattes.cnpq.br/3572375884177951>

2. EDUCATION

1982 – PhD at University of Waterloo, Canada.

1979 – MASc at University of Waterloo, Canada.

1976 – Bachelor of Electrical Engineering at Universidade Federal da Paraíba, Brazil.

1971 – High School Diploma (12th grade) at Colégio Marista, Recife, PE, Brazil.

1970 – High School's junior year (11th grade) at Sacred Heart Academy, Mt. Pleasant, MI, USA.

1968 – Junior High School Diploma (8th grade) at Sacred Heart Vocational School, Paudalho, PE, Brazil

3. PROFESSIONAL EXPERIENCE

3.1. Regular Teaching

2002–Present – Federal University of Campina Grande (UFCG, Brazil), Systems and Computing Department (DSC), professor.

Developed and taught several courses in graduate program on informatics (COPIN) and for the undergraduate programs on computer science and business administration & accounting, including:

- Graduate courses: Software engineering; project management.
- Undergraduate courses: IT Economics; Numerical methods and software; Informatics & Entrepreneurship; Performance Evaluation of discrete systems; Computer organization.

1985–2000 – Federal University of Paraíba (UFPB, Brazil), Systems and Computing Department, professor.

Developed and taught several courses in graduate and undergraduate programs on computer science, including:

- Graduate courses: Software engineering; Operating systems - Unix; Queueing theory; Selecting new information technologies; Digital simulation techniques; Computer networks architecture; Computer networks protocols.
- Undergraduate courses: Computer organization; Computer networks; Operating systems; Management & financing of software development.

1982–1985 – Federal University of Paraíba (UFPB, Brazil), Electrical Engineering Department, professor.

Developed and taught several courses in graduate and undergraduate programs on electrical and electronics engineering, including:

- Graduate courses: Probability theory; Stochastic processes; Introduction to queueing theory; Advanced queueing theory; Renewal theory.
- Undergraduate course: Communications principles

1982–1980 – University of Waterloo (Canada), Department of Electrical Engineering, teaching assistant.

- Undergraduate courses: EE 427 "Hardware engineering", EE 317 "Signal analysis" and EE 316 "Probability and statistics"

From 1980 to January 2018 (70 semesters), over 4,500 undergraduate and around 700 graduate students from UFCG and UFPB have attended courses taught.

3.2. Sporadic Courses

Designed and/or taught, supervised monographs and projects of and/or coordinated whole graduate specialization programs or individual intensive courses which were offered as extension activities, most in cooperation with other universities or higher education institutions in the Amazon, Northeast, Brasília, Rio de Janeiro and South of Brazil, and in the United States of America as well. Recent activities include:

2005–2014 – MBA on IT Management and Governance
– MBA on IT (1st, 2nd and 3rd editions)
UNIPÊ, João Pessoa, PB, Brazil.

2004–2006 – IT Security Management, Federal Institute of Paraíba (IFPB), Brazil.

2001–2002 – Software Business Management, intensive course, Rui Barbosa Foundation (FRB),
Salvador, BA, Brazil.

2000–2001 – e-Commerce and Business Analyst, Euvaldo Lodi Institute (IEL), Paraíba Federation
of Industries (FIEP), the Brazilian Small Companies Service Bureau (SEBRAE),
UFCG.

1997–1999 – Advanced Topics on Computer Networks
– Distributed Systems and Computer Networks
courses of the Graduate Program on Informatics UNIFACS, Salvador, BA, Brazil.

1996 – Software Business: The American Way, Nova Southeastern University, Ft. Lauderdale, FL,
USA.

Starting in 1983, a total of 21 (editions of) graduate programs or individual courses with an
estimated audience of 600 students have been supported by these activities.

3.3. Administrative Positions

2007-2011 – Extension officer, DSC/UFCG.

1998-1999 – Member of the Departmental Chamber, DSC/ UFPB.

1998-1996 – Graduate deputy officer for the Graduate Course on Informatics (COPIN), UFPB.

1997-1994 – UFPB coordinator for UNDP/CNPq's Thematic Projects (ProTem Phase II)

1994-1995 – General coordinator for UNDP/CNPq's Software-for-Export Program Nucleus of
Campina Grande, PB, Brazil.

1991-1993 – Thematic coordinator for Distributed Systems and Computer Architecture – ProTem,
in Northeastern Brazil.

1990-1991 – Graduate officer for the Graduate Course on Informatics (COPIN), UFPB

1985-1988 – Technical diretor of the Electrical-Electronics Technology Institute (ITEEL),
Campina Grande, PB, Brazil.

1983-1985 – Coordinator of the Computer Networks Reseach Group (GRC/UFPB).

1984-1983 – Deputy executive officer for the Brazilian Computer Netwroks Laboratory (LARC).

3.4. Services for the Industry

Provided services on IT encompass:

- a) research and development activities;
- b) prospecting of technical, marketing and commercial partnerships;
- c) specification of products and services and their evolution;
- d) marketing and sales studies, planning and execution;
- e) organization and execution of professional visits and missions;
- f) organization and management of presence in trade shows;
- g) writing of technical reports on technology trends and investment recommendations, course materials and books for companies or articles for trade publications; and,
- h) speaking engagements at IT trade events.

Major, long-term engagements include:

2000–2015 – The Brazilian Small Companies Service Bureau (SEBRAE) and the Paraíba State Technology Park Foundation (PqTc-PB). Services b), c), d), g) and f) with emphasis on e-Business for micro and small companies.

2004–2009 – Hewlett-Packard (HP) through its Labs in Bristol (UK) and Palo Alto, CA, USA. Services a), c), g) – three technical reports; and, h) on Business-Driven IT Management.

2003–2009 – The São Francisco Hydroelectric Company (CHESF, Brazil). Services a), c), e), g) and h) on Service Level Management, Business Impact Management and IT Governance.

2000–2009 – Manaus Free Trade Zone. Services b), c), d) and g) for a software park in the Amazon region.

1997–2000 – The Society for the Promotion of Software Export (SOFTEX) and its 1,600 plus associated companies, sponsored by the Brazilian Ministry of Science and Technology (MCT) and the United Nations Development Programme (UNDP). Services b), d), e), f), g) and h). Results include cooperation agreements with Argentina's Cámara de Empresas de Software y Servicios Informáticos (CESSI) and India's National Association of Software and Services Companies (NASSCOM); participation of Brazilian software companies in trade shows in Las Vegas, USA, Hannover, Germany, and Beijing, China; and, installation and operation of offices to represent and to promote these companies in the USA, Germany and China.

1996–1997 – Lantimes, a print and online journal on Local Area Networks. Regular article contributor.

1995–1996 – The Brazilian Software & IT Services Companies Association (ASSESPRO) and its 1,500 plus associated companies. Services b), d), e) and h). Services led to cooperation agreements with the Israeli Association of Software Houses (IASH) and the Computer Society of India (Goa Chapter), Panjim, Goa, India.

1992–1994 – 3i Lisbon and O’Porto, Portugal. Service h) on the Unix Operating System.

1989–1994 – Computerworld regular columnist of monthly *MundoUnix* Newsletter (in Portuguese). Service g).

1985–1999 – McGraw-Hill. Author. Service g): writing of seven books on Local Area Networks (sponsored by EMBRATEL – please see below), Unix Operating Systems (sponsored by Computadores Brasileiros – COBRA) and Word Processing for Unix (sponsored by Light-Infocon).

1985–1996 – Empresa Brasileira de Telecomunicações (EMBRATEL, - now part of the América Móvil Telecom Group, Mexico). Service g): writing of two books on Local Area Networks (published by MacGraw-Hill) and course material on Operating Systems.

1984–2000 –Light-Infocon Tecnologia S/A, founder, partner and chief strategist for over 15 years. Software development house for Unix, Windows and Web systems with awards and clients world-wide. Awards were received in: Brazil - Innovation by ASSESPRO; Spain - PC-World España Editor’s Choice for the textual database Light-Base; and, the USA - Top of the World of the Unix World Magazine for the print spooler SpoolView. (The company continued to receive awards for its products and operating procedures after he left it.)

It is estimated that these services produced 60 articles and technical reports until now (there were 39 until 2005 when their tallying was discontinued), a similar number of speaking engagements (1/3 of which had written support documentation), and, adjusting for simultaneous ASSESPRO and SOFTEX associates, may have assisted over 500 companies.

4. RESEARCH AND DEVELOPMENT

R&D activities span multiple areas and they are unified by the common ground of performance modelling & evaluation. They cover four overlapping time periods each of which is ongoing with results still being produced, albeit with dampened concentration in the areas of three first periods. The dates for each period indicate interval with higher concentration of efforts and results.

1977-1989 – This R&D period initiated with graduate studies at the University of Waterloo, Canada and dealt with the modelling and evaluation of performance of computer systems, computer networks in particular. The Master's and PhD theses (1979 and 1982, respectively) and the supervision of the PhD thesis on “Modelling Time-Critical Applications in Token Passing Local Area Networks” of Marcos A. G. Brasileiro (1989, UFPB) illustrate the research of this period. Other results include the book “Local Area Networks: High-Level Protocols and Performance Evaluation” published by McGraw-Hill in Brazil (1986) and later translated in Spain (1989). Current work includes modelling of points likely to fail in a network for redundancy planning. This work is being carried out with participation of a postdoctoral fellow and a PhD candidate.

1989-2007 – R&D efforts concentrated on engineering, marketing, sales, support and economics aspects of commercial software. During this period, a US\$ 300,000 grant from the Brazilian Research Council (CNPq) was secured for the execution of the “R-Cycle: A Practical Approach for Managing Processes in the Life Cycle of Software Products” project. R-Cycle results had lasting repercussions on small and medium size software houses in Brazil. Also, a customized course on the internationalization of small software companies was designed and offered in partnership with Nova Southeastern University, USA (1997). Other results include the PhD thesis “A Multiple Objective Value Analysis-based Model for Decision Support in the Internationalization of Software Products and Services” of Francilene P. Garcia, (1999, UFPB). Her thesis was partially developed at Tsinghua University and the Institute of Software of the Chinese Academy of Sciences (ISCAS), Beijing, China. Ongoing work focus on requirements engineering aspects of specialized software applications (e.g., medical systems).

2000-2009 – Work centered on e-Governance and on Business-Driven IT Management (BDIM). Results on e-Governance were produced in collaboration with the University of Coimbra, Portugal and electrical utilities in Portugal and Brazil. BDIM work was carried out in partnership with Hewlett-Packard Bristol (UK) and Palo Alto (CA, USA) Labs. UFCG and HP Labs contributed to the creation of the BDIM research area and the homonymous international workshop held in conjunction with the prestigious IEEE symposia IM and NOMS. Up to 2009, Antão had coordinated joint HP Labs-UFCG projects on BDIM with a total budget of over US\$ 1,000,000. José A. Neto's 2010 “A formal Model to Evaluate Business Value and its Application to Information Technology” PhD thesis on BDIM was supervised during this period, having a paper based on its contents received best paper award at the 4th IEEE / IFIP International Workshop on Business-Driven IT Management, New York, USA (2009). Previous work on BDIM was also granted best paper award of 2007 NOMS. BDIM work continues to this day with publication of papers by international journals and supervision of dissertations and theses mainly on complex systems simulation

using system dynamics in cooperation with international partners such as the University of Southampton, UK and the University of Tartu, Estonia.

2010-Present – Currently, investigation is on the topic of serious, alternate reality gamified software applications for complex social problems, such as fighting the *Aedes aegypti* mosquito (vector for the yellow fever, Dengue, Zika and Chikungunya viruses), water resources management and e-Learning by audiences with special needs (e.g., Down syndrome). Besides eliciting requirements of such applications, R&D activities of this period encompass their implementation, tests and evaluation of their effectiveness. As such, current activities tie up with those of past R&D periods by applying acquired modelling and evaluation skills and experiences. Results for Down syndrome received educational games track's best paper award of the Brazilian Symposium on Computer-based Education in October 2017. R&D activities in this fourth period are part of cooperation with the University of Koblenz, RAC, Germany and the University of the Sunshine Coast (USC), Australia. A major goal of this R&D period is to strengthen ties with USC by increasing number of joint publications, project proposals & development and supervised exchange graduate students on the investigation topic.

Further information on some of the results from the four R&D periods follows. Please note that

- **ACM Papers** - Copyright © by Association for Computing Machinery, Inc. Permission to make digital or hard copies of part of all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage. To copy otherwise, to republish, to post on servers, or to redistribute to lists, requires prior specific permission and/or a fee.
- **IEEE Papers** - Copyright © by IEEE. Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit. To copy otherwise, to republish, to post on servers, or to redistribute to lists, requires prior specific permission and/or a fee.
- **Other works** - Copyright belongs to their respective owners whom should be contacted for copying or republishing permission.

4.1. Awards, Assignments & Scholarships

- 2017 – **Best Paper Award** of the *Games for the Promotion of Learning* Track (Track 3), XXVIII Brazilian Symposium on Computer-based Education (SBIE) of the Brazilian Computing Society (SBC), Recife, Brazil, Oct 2017. (SBIE holds no overall paper award.)
- 2009 – **Best Paper Award**, IEEE / IFIP 4th International Workshop on Business-Driven IT Management, New York, USA.
- 2007 – **Best Paper Award**, IEEE / IFIP 18th IFIP/IEEE International Workshop on Distributed Systems: Operations and Management - DSOM 2007.
- 2001 – “Marlim de Cristal” – Pan-American Institute for Leadership in Business Administration (Instituto Pan-Americano de Liderança em Administração de Negócios - PLAN), Maceió, AL, Brazil
- 2000 – Scholarship from Euvaldo Lodi Institute (IEL) for engagement with the *Global Strategies for e-Business* initiative, Harvard University, Cambridge, MA, USA.
- 1987 – 1996 – The Brazilian Research and Development Council (CNPq), Level I Research Scholarship.
- 1982 – 1987 – The Brazilian Research and Development Council (CNPq), Level II Research Scholarship.
- 1980 – 1982 – Coordination for the Improvement of Higher Education Personnel (CAPES) Scholarship, PhD Programme at the University of Waterloo, Waterloo, Canada.
- 1980 – 1982 – Teaching Assistant, Department of Electrical Engineering, University of Waterloo, Canada.
- 1979 – 1982 – Research Assistant, Computer Communication Networks Group (CCNG) University of Waterloo, Canada
- 1977 – 1979 – Canadian International Development Agency (CIDA) Scholarship, MASc Programme at the University of Waterloo, Waterloo, Canada.
- 1970 – Honorary Citizen, Mt.Pleasant, Michigan, USA.
- 1970 – Exchange Student, Sacred Heart Academy, Mt. Pleasant, Michigan, EUA - Youth For Understanding Program (YFU).

4.2. Participation in R&D Projects

- 2013 – Present – ClipCult Project – A Serious Game for Paraíba State’s Cultural e-Magazine, UFCG, Paraíba State R&D Foundation (FAPESQ) and Ministry of Culture, Brazil. Researcher.

- 2010 – 2012 – Lab2Market – Support for the R&D&Innovation Full Cycle, UFCG, the Brazilian Research Council (CNPq – Grant No. 554373/2010-6). Researcher.
- 2003 – 2009 – HP-Bottom Line – Business-Driven IT Management, UFCG, Hewlett-Packard Labs Bristol (UK) and Palo Alto (US). Coordinator and researcher.
- 2009 – 2008 – CHESF Bottom Line 2 – Practices and tools for IT Governance at Electrical Utilities, UFCG, Universidade de Coimbra (Portugal), the Brazilian Electrical Energy Agency (ANEEL), the São Francisco Hydroelectric Company (CHESF), Eletricidade de Portugal (EDP). Coordinator and researcher.
- 2005 – 2003 – FreeROI – A tool for ROI Analysis of Open Source Software, UFCG, ANEEL, CHESF. Coordinator and researcher.
- 2003 – 2002 – Informatio Omnibus, UFPB, FACISA, Federal Institute of Education, Ceará State, Brazil, Information Society Program (SocInfo), Brazilian Ministry of Science and Technology (MCT), the Brazilian Research Council (CNPq).
- 2001– 2000 – Central Web, UFPB, Institute of Software of the Chinese Academy of Sciences (ISCAS) and the Brazilian Research Council (CNPq).

4.3. Supervision of Graduate and Post-Doctoral R&D Work

Acted as supervisor or co-supervisor for over 40 theses, dissertations and end-of-course projects or R&D work in PhD, MSc and other graduate programs, including post-doc at UFPB, UFCG and other universities – such as:

- Brazil – Federal University of Ceará (UFC), University Center of João Pessoa (UNIPÊ);
- Canada – University of Waterloo;
- China – Tsinghua University;
- England – University of Southampton;
- Paraguay – San Carlos University;
- Portugal – University of Coimbra; and,
- USA – Nova Southeastern University and Grand Valley State University.

Some impacting results are the:

- end-of-course project on “Accessibility of Communications Products and Services for Hearing-Impaired People” by Ana Siqueira (2013, hearing-impaired herself);
- MSc dissertation by Ruan Pereira on “A Crowdsourcing Game to Fight Dengue Fever” (2015);
- PhD thesis on “The Dynamics of IT Outsourcing Management for Decision Support: A Case Study at Government Organizations” by Tarcio Bezerra (2015); and,
- Post-Doc work by Alberto Sampaio on “Decision Support Systems for IT Management Committees” (2017).

Ongoing theses concentrate on Business-Driven IT Management and Serious Games for Social Change.

4.4. Theses

- 1993 – Computer Science Full Professor Thesis entitled “A Set of Mathematical Criteria for Validation of Local Communication Sub-Networks Simulators”, UFPB, Brazil.
- 1982 – PhD Thesis “Hierarchical Modelling of Local Area Networks Under File Transfer”, University of Waterloo, Canada.
- 1979 – MASc Thesis "Loops and Ethernet: Evaluation and Comparison of Performance and Complexity", University of Waterloo, Canada.

4.4. Books and Book Chapters

- 2017 – “Marketplace-Driven, Game-Changing IT Games to Address Complex, Costly Community Problems” - J. Antão B. Moura, Marcelo A. de Barros, R. P.Oliveira, in *Digital Marketplaces Unleashed*, C. Linnhoff-Popien et al. (eds.), Chapter 21, Springer-Verlag GmbH Germany 2017, DOI 10.1007/978-3-662-49275-8_21 pp. 193-204.
- 2016 – “A System Dynamics Simulator for Decision Support in Risk-Based IT Outsourcing Capabilities Management” - Bezerra T.R., Moura A., Bullock S., Pfahl D. In: Obaidat M., Ören T., Kacprzyk J., Filipe J. (eds) *Simulation and Modeling Methodologies, Technologies and Applications. Advances in Intelligent Systems and Computing*, Vol 402. Springer, Cham, Switzerland ISSN: 2194-5357 ISBN (Print): 978-3-319-26469-1 ISBN (eBook): 978-3-319-26470-7 DOI: 10.1007/978-3-319-26470-7_7 pp. 131-152.
- 2014 – “Simultaneously Improving Quality and Time-to-Market in Agile Development” - Priscilla Marcilli Dóra, Ana Cristina Oliveira and J. Antão B. Moura, in "Communications in Computer and Information Science" (CCIS) Series (ISSN: 1865-0929) – Software Technologies, José Cordeiro & Marten van Sinderen (Eds.), ICSoft 2013, CCIS 457, Springer-Verlag, Berlin Heidelberg, 2014 – http://link.springer.com/chapter/10.1007%2F978-3-662-44920-2_6#page-1 DOI: 10.1007/978-3-662-44920-2_6 pp. 84-98.
- 1999 - “Redes de Computadores – Serviços, Administração e Segurança” – J. Helvécio Teixeira Jr., Jacques P. Sauvé, J. Antão B. Moura e Suzana de Queiroz R. Teixeira; Makron Books, 493 pp.
- 1996 - "Do Mainframe para a Computação Distribuída - Simplificando a Transição" - J. Helvécio Teixeira Jr., Jacques P. Sauvé e J. Antão B. Moura; IBPI Press, 229pp.
- 1994 - "Aumentando Produtividade e Qualidade em Sistemas Abertos" – Álvaro F. de Castro Medeiros, Jacques P. Sauvé, J. Antão B. Moura e Pedro S. Niccolletti; Makron Books, 371pp.
- 1989 - “Redes Locales de Computadoras: Protocolos de Alto Nivel y Evaluación de Prestaciones” – J.AB. Moura, J.P. Sauvé, W.F. Giozza e J.F.M. de Araújo; McGraw-Hill/Interamericana de España SA, 442pp. (Translation to Spanish of 1986, 446-pp book.)
- 1988 - “UNIX: Guia do Usuário” – M.C. Sampaio, J.AB. Moura e J.P. Sauvé; McGraw-Hill do Brasil, 368 pp.

- 1987- “SOX: Conceitos Básicos” - M.C. Sampaio, J.A.B Moura e J.P.Sauvé; *McGraw-Hill* do Brasil/COBRA, 222pp.
- 1987 - “Processamento de Textos no MS-DOS e UNIX” – M.C. Sampaio, J.A.B. Moura e J.P. Sauvé; *McGraw-Hill* do Brasil, 224pp.
- 1986 - “Redes Locais de Computadores: Protocolos de Alto Nível e Avaliação de Desempenho” - J.A.B. Moura, J.P. Sauvé, W.F. Giozza e J.F.M. de Araújo; *McGraw-Hill* do Brasil, 446pp.
- 1986- “Redes Locais de Computadores: Tecnologia e Aplicações” - W.F. Giozza, J.F.M. de Araújo, J.A.B. Moura e J.P. Sauvé; *McGraw-Hill* do Brasil, 399pp.

4.5. Journal Papers (last 10 years)

- 2018 – *A Consensus-based Multi-Criteria Group Decision Model for Information Technology Management Committees*, Alberto Sampaio Lima; José Neuman de Souza; J. Antão B. Moura; Igor P. da Silva, In *IEEE Transactions on Engineering Management*, Volume PP, Issue 99, Pages 1-17 (2018), Print ISSN: 0018-9391, Online ISSN: 1558-0040, DOI: 10.1109/TEM.2017.2787564. To appear.
- 2015 - *A Petri net-based decision-making framework for assessing cloud services adoption: The use of spot instances for cost reduction*, Ribas, Maristella; Furtado, C. G.; Souza, Neuman; Barroso, Giovanni; Moura, Antão ; Lima, Alberto S.; Sousa, Flávio R.C., In *Journal of Network and Computer Applications*, v. 57, Issue C, p. 102-118, 2015, Academic Press Ltd. London, UK. ISSN: 1084-8045, DOI: 10.1016/j.jnca.2015.07.002.
- 2015 - *IT Governance Practices for Electric Utilities: Insights from Brazil and Europe*, Paulo Rupino da Cunha, Luiz Mauricio Martins, Antão Moura, António Dias de Figueiredo, In *Open Journal of Information Systems (OJIS)*, 2(1), Pages 9-28, RonPub UG (haftungsbeschränkt), Lübeck, Germany, May 2015. ISSN 2198-9281.
- 2015 - *Selecting frameworks for multi-agent systems development for the oil industry*, Priscilla Marcilli Dóra, Ana Cristina Oliveira, J. Antão B. Moura, In *Revista Cubana de Ciencias Informáticas*, vol.9, n.1, pp. 78-93, Universidad de las Ciencias Informáticas, Havana, Cuba, January-March 2015. ISSN: 1994-1536 (Print); 2227-1899 (Online).
- 2011 - *Prioritizing Information Technology Service Investments under Uncertainty*, Sauvé, J., Queiroz, M, Moura, A., Bartolini, C. and Hickey, M., In *IEEE Transactions on Network and Service Management*, Vol. 8, No. 3, September 2011, pp. 1-15, ISSN 1932-4537, DOI: 10.1109/TNSM.2011.201000077.
- 2009 - *SLA Design and Service Provisioning for Outsourced Services*, Sauvé, J., Marques, F. and Moura, A., In *Journal of Network and Systems Management*: Volume 17, Issue1 (2009), Page 73, December 2009.

- 2008 - *Business-Driven Information Technology Management – Upping the ante of IT*, Moura, A., Sauv , J., and Bartolini, C., In IEEE Communications Magazine (COMMAG), October 2008.
- 2008 - *Change Priority Determination in IT Service Management Based on Risk Exposure*, Jacques Sauv , Rodrigo Santos, Rodrigo Rebou as, Ant o Moura, Claudio Bartolini (2008). In IEEE Transactions on Network and Service Management (TNSM), Vol. 5, No. 3, Sept. 2008.

4.6. Selected Papers in Peer-Reviewed Conferences (last 10 years)

- 2018 – *Teaching of Programming -An Educational Performance Booster for Students at Economically Disadvantaged Schools*, Paulo Brito, J. Ant o B. Moura, Joaquim Hon rio, Marcelo Barros and Igor Vieira. In Proceedings of CSEDU 2018, 10 pp., Funchal, Madeira, Portugal, 15-17 March 2018, To appear.
- 2018 – *Designing Gamified E-learning applications for children with down syndrome. The case of teaching literacy and language skills*, Igor Vieira, Antao Moura, Uwe Terton, Mark Bilby, and Marcelo Alves de Barros. In Proceedings of CSEDU 2018, 10 pp., Funchal, Madeira, Portugal, 15-17 March 2018, To appear.
- 2018 – *Gamification in Location-based m-Learning: Students' Perceptions of Game Elements*, Joaquim Hon rio, J. Antao B. Moura, Paulo Brito, Talita Menezes and Marcelo Barros. In Proceedings of CSEDU 2018, 10 pp., Funchal, Madeira, Portugal, 15-17 March 2018, To appear.
- 2017 – *Requisitos para Aplica  es Gamificadas e de Realidade Alternada para Alfabetiza  o e Aquisi  o da Linguagem em Crian as com S ndrome de Down*, Igor de Souza, J. Ant o B. Moura, Carla Ghirello-Pires, Proceedings of the XXVIII Brazilian Symposium on Computers in Education (SBIE 2017), ISSN 2316-6533, DOI: <http://dx.doi.org/10.5753/cbie.sbie.2017.867> , pp.867-876. **Best Paper of its track.**
- 2016 – *Gamifica  o e Crowdsourcing para Melhoria do Combate ao Aedes Aegypti*, Ruan Pierre Oliveira , Jos  Ant o Beltr o Moura , Marcelo Alves Barros , Ana Carolina Policarpo Cavalcante, , In Anais do XV Congresso Brasileiro de Inform tica em Sa de (CBIS 2016), ISSN 2175-4411, pp. 963-972.
- 2016 – *An is: A Conceptual Framework for Blended Active Learning in Healthcare*, Adriano Araujo Santos, Jos  Ant o Beltr o Moura, Joseana Mac do Fechine Regis de Ara jo and Marcelo Alves de Barros. In Proceedings of CSEDU 2016 pp. 199-206, Rome, Italy, ISBN: 978-989-758-179-3, DOI: 10.5220/0005920901990206.
- 2015 – *A conceptual framework for decision-making support in uncertainty- and risk-based diagnosis of rare clinical cases by specialist physicians*, Santos, A. A., Moura, J. Ant o B., Fechine, J. M.. In proceedings of the 15th World Congress on Health and Biomedical Informatics - MEDINFO 2015 - by SBIS (Brazilian Health Informatics Association) on behalf of the International Medical Informatics Association (IMIA), Sao Paulo, Brazil, 19th-23rd August 2015.
- 2015 – *Blended learning in multi-disciplinary classrooms - Experiments in a lecture about*

- numerical analysis*, Marcelo Barros, J. Antão B. Moura, Laurent Borgmann and Uwe Terton. In Proceedings of the 7th International Conference on Computer Supported Education (CSEDU 2015), pp. 196-204, 23-25 May 2015, Lisbon, Portugal. DOI: 10.5220/0005409001960204.
- 2015 – *Modeling the use of spot instances for cost reduction in cloud computing adoption using a Petri net framework*, Furtado, C.G., Barroso, G., Lima, A.S., Souza, N., and Moura, A., In Proceedings of IFIP/IEEE International Symposium on Integrated Network Management (IM), pp. 1428 – 1433, 11-15 May 2015, Ottawa, Canada, INSPEC Accession Number: 15278024. DOI: 10.1109/INM.2015.7140507.
- 2015 – *A system dynamics model for managing service desk capacity*, Fenner, G., Lima, A., de Souza, N., Moura, A., and Andrade, R. In Proceedings of IFIP/IEEE International Symposium on Integrated Network Management (IM), pp. 1424 - 1427, 11-15 May 2015, Ottawa, Canada, INSPEC Accession Number: 15277944. DOI: 10.1109/INM.2015.7140506.
- 2014 – *A Simulation Model for Risk Management Support in IT Outsourcing*, Tarcio R. Bezerra, Seth Bullock and J. Antão B. Moura, In Proceedings of the 4th International Conference on Simulation and Modeling Methodologies, Technologies and Applications SIMULTECH 2014 – Vienna, Austria, 28-30 August, 2014, pp. 339-351, ISBN 978-989-758-038-3. Scitepress DOI: 10.5220/0005035703390351.
- 2014 – *Selección de Frameworks para Desarrollo de Sistemas Multi-agente para la Industria Petrolera*, artigo código CIISI-01 In II Congreso Internacional de Ingeniería Informática y Sistemas de Información, 17 Convención Científica de Ingeniería y Arquitectura – 17 CCIA, Havana, Cuba, 24 a 28 de novembro de 2014.
- 2014 – *A System Dynamics Model to Support Strategic Decision Making on IT Outsourcing: A Case Study at a State Revenue Agency in Brazil*, Bezerra, T.R., Moura, A., Lima A. S., In Network Operations and Management Symposium (NOMS), 2014 IEEE, pp. 1-4; 5-9 May 2014 DOI 10.1109/NOMS.2014.6838369
- 2014 – *Assessing Cloud Computing SaaS Adoption for Enterprise Applications using a Petri Net MCDM Framework*, Ribas, M., Lima, A.S., Souza, N., Moura, A., Sousa R. F. C., and Fenner, G., In Network Operations and Management Symposium (NOMS), 2014 IEEE, pp. 1-6; 5-9 May 2014 DOI 10.1109/NOMS.2014.6838372
- 2014 – *Game Based Learning in IT Service Transition- The Case of a Mobile Sales Service by a Small Team in Brazil*, Thiago Paiva Brito, Josias Paes, J. Antão B. Moura, 6th International Conference on Computer Supported Education – CSEDU 2014, Barcelona, Spain. Pp.110-116, DOI [10.5220/0004828401100116](https://doi.org/10.5220/0004828401100116)
- 2013 – *Improving Quality in Agile Development Processes*, Pryscilla Marcilli Dóra, Ana Cristina Oliveira, J. Antão B. Moura, In Conference on Software Technologies (ICSOFT-EA), pages 411-416. July 29th to 31st, 2013, Reykjavík, Iceland. DOI: 10.5220/0004559704110416.
- 2013 – *Blended Learning and Consulting for Resource Limited Enterprises: The case of a Prototyping, Production and Logistics Service Centre at a Business Incubator in Brazil*, J. Antão B. Moura, Marcelo A. de Barros, Francilene P. Garcia, In Proceedings of 5th International Conference on Computer Supported Education (CSEDU 2013), pp. 477-483,

May 6-8, 2013, Aachen, Germany. DOI: 10.5220/0004342504770483

- 2013 - *A Baseline for Quality Management in Software Projects*, Priscilla Marcilli Dóra, Ana Cristina Oliveira, J. Antão B. Moura, In Proceedings of VI International Workshop of Quality on Information Technologies and Communications – “QUALITY 2013”, March 18-22, 2013, Havana, Cuba, ISBN 978-959-7213-02-4.
- 2012 – *Lab2Market - Circumventing Barriers to Continuous Innovation at Small, Financially Restricted Enterprises*, J. Antão B. Moura, Francilene P. Garcia, Sofia S. Moura, Elisonete V. Amorim, Fabiana T. Medeiros, In Proceedings of 6th IEEE International Conference on the Management of Innovation and Technology – ICMIT 2012, June 11-13, 2012, Bali, Indonesia. IEEE Catalog Number 12795-CDR ISBN 978-1-4673-0109-1
- 2011 – *A Business-Driven IT Services Improvement Model*, Alberto S. Lima, J. Neuman de Souza, A.C. Callado, J. Augusto Oliveira, Jacques Sauvé, Antão Moura, Proceedings of the 4th IFIP/IEEE Workshop on Distributed Autonomous Network Management Systems, IM 2011 – DANMS, Dublin, Ireland, 2011.
- 2010 – *Value-driven IT Service Portfolio Selection under Uncertainty*, Oliveira, J.A., Sauvé, J.P., Moura, J.A.B., Queiroz, M., Bartolini, C., Hickey, M., In Proceedings of 5th IEEE/IFIP International Workshop On Business-Driven IT Management in conjunction with the Network Operations & Management Symposium - NOMS 2010, April 19, 2010, Osaka, Japan, pp. 416-423.
- 2010 – *Selecting and Ranking IT Governance Practices for Electric Utilities*, Martins, L. M., Cunha, P. R., Moura, A., and Figueiredo, A. (2010), In Proceedings of the 16th Americas Conference on Information Systems (AMCIS 2010), Lima, Peru, Paper 120.
- 2010 – *A Framework to Support Investment Decisions using Multi-criteria and under Uncertainty in IT Service Portfolio Management*, Magno Queiroz, Antão Moura and Jacques Sauvé, Claudio Bartolini, Marianne Hickey, In Proceedings of 5th IEEE/IFIP International Workshop On Business-Driven IT Management in conjunction with the Network Operations & Management Symposium - NOMS 2010, April 19, 2010, Osaka, Japan, pp. 1-9.
- 2009 – *A Model for Decision Support in Business-Driven IT Service Portfolio Management using SLA-dependent Criteria and under Uncertainty*, Queiroz, M., Moura, J.A.B., Sauvé, J.P., Bartolini, C., Hickey, M., In Proceedings of The International ACM Conference on Management of Emergent Digital EcoSystems (MEDES 2009), Lyon, France, October 2009.
- 2009 – *Looking at Business through a Keyhole*, Sauvé, J.P., Bartolini, C., Moura, J.A.B., in Proceedings of the 4th IEEE / IFIP International Workshop On Business-Driven IT Management, New York, USA, June 2009.
- 2009 – *Value-based IT Decision Support*, Oliveira, J.A., Moura, J.A.B., Bartolini, C., Hickey, M., in Proceedings of the 4th IEEE / IFIP International Workshop On Business-Driven IT Management, New York, USA, June 2009. **Best Paper of the event.**

- 2008 – *A Possibility Theoretic Model for Decision Support in Business-Driven IT Service Portfolio Financial Management under Uncertainty*, Moura, A., Sauv , J., and Boulmakoul, A. , in Proceedings of HP-SUA 2008.
- 2008 – *Business-Driven IT Management in Adaptive Computing*, Moura, A. and Oliveira, J.A., Proceedings of the Latin-American Autonomic Computing Symposium (LAACS) 2008.
- 2007 – *On the Risk and Priority Determination of Changes in IT Service Management*, Sauv , J., Santos, R., Almeida, R. and Moura, A., In Proceedings of 18th IFIP/IEEE International Workshop on Distributed Systems: Operations and Management - DSOM 2007, 2007, San Jos , United States. Large Scale Management of Distributed Systems. Heidelberg: Springer Berlin, 2007. **Best Paper of the event.**
- 2007 – *Service Level Agreement Design and Service Provisioning for Outsourced Services*, Marques, F., Sauv , J. and Moura, A., In Proceedings of LANOMS 2007 (Latin American NOMS 2007), Petropolis, RJ, Brasil.
- 2007 – *Addressing Challenges of OSS Application Development for IT Na ve, Poor Users*, Moura, J.A.B., Garcia, F.P., Muniz, I., Oliveria, J.A. and Barros, M., In Proceedings of the European Commission / IEEE eChallenges 2007 - Expanding the Knowledge Economy - Issues, Applications, Case Studies, Vol. 4, IOS Press, Amsterdam, ISBN 9781586038014, pp.197-204.
- 2007 – *Research Challenges of Business-Driven IT Management*, J. Ant o B. Moura, Jacques Sauv  and Claudio Bartolini , in Proceedings of the 2nd IEEE / IFIP International Workshop On Business-Driven IT Management, Munich, Germany, 2007.
- 2007 – *A decision support tool to optimize scheduling of IT changes*, Rodrigo Rebou as, Jacques Sauv , Ant o Moura, Claudio Bartolini and David Trastour, in Proceedings of the Tenth IFIP/IEEE International Symposium on Integrated Network Management (IM 2007), 21-25 May 2007, Munich, Germany.
- 2007 – *Risk Issues of Free, Open Source Software in Financially Restricted Scenarios*, Moura, O., Martins, L. M.F., Moura, A., Garcia, F. and Fachine, J., *In Proceedings* of IST-Africa 2007, (Session 3a: Networked Business for SMEs) – a conference supported by the European Commission under the IST Programme (Framework Programme 6) and technical co-sponsorship from IEEE; Maputo, Mozambique, 9-11 maio 2007.

4.7. Patents

- 2017 – Filing Process BR 20 2017 002542 5 - Request 870170008409, February 7th, 2017, 15 pp. Applicants: Adriano Araujo Santos, Jos  Ant o Beltr o Moura, Joseana Mac do Fachine R gis de Ara jo. Title: “Processo de Aux lio   Tomada de Decis o em Casos Cl nicos Desconhecidos Considerando Riscos Sob Incertezas”. (“Decision-making support process in uncertainty- and risk-based diagnosis of rare clinical cases”).)

5. PRODUCTION INDICATORS

The numbers in the table below summarize the information in the previous sections for 41+ years (December 1976 to January 2018) of continued professional activity.

Indicator	Total since Dec 1976
Total supervised graduate works	40+
PhD theses	6
MAsc dissertations	24
End-of-graduate course projects, monographies	12+
Books (Brazil, Spain)	8
Book chapters (Germany, Switzerland)	3
Total papers and reports	185+
Journals (Yearly Avg; Last 10 yrs; Last 5 yrs)	18 (0.44; 0.8; 0.8)
International Conferences (Yearly Avg; Last 10 yrs; Last 5 yrs)	68 (1.66; 2.9; 3.6)
Conferences in Brazil	40
Invited	60+
Distinct courses prepared and taught	~40
Patents	1

Campina Grande, PB, Brazil, January 31st, 2018

José Antão Beltrão Moura