

Paulo Coelho

## Curriculum Vitae (Short Version)

### Personal Data

**Name:** Paulo M. M. Coelho  
**Date and Place of Birth:** December 20, 1964, Mirandela  
**Nationality:** Portuguese

### Address

Instituto Politécnico Tomar - ESTT  
 Engineering Department - Electrical Section  
 Quinta do Contador – Estrada da Serra  
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### Education

2004	Ph.D in Electrical Engineering, specialization in Control and Instrumentation, University of Coimbra
1995	M.Sc. in Engineering Sciences, specialization in Industrial Engineering, University of Coimbra
1990	B.Sc. ("Licenciatura"- 5 years) in Electrical Engineering, University of Coimbra

### Academic Positions

1999 - --	Associate Professor (Professor Adjunto) at The Department of Engineering (Electrical Section) of the Polytechnic Institute of Tomar
1998 - 1999	Teaching Assistant 2nd Triennium at The Department of Engineering (Electrical Section) of the Polytechnic Institute of Tomar (IPT)
1996 - 1998	Teaching Assistant 1st Triennium at The Department of Engineering (Electrical Section) of the Polytechnic Institute of Tomar
1997 - 2010	Assistant Researcher at the Institute for Systems and Robotics – Coimbra Pole (ISR) – University of Coimbra
1991 - 1993	Research Grant (BI) for M.Sc. in University of Coimbra, funded by the National Board of Technological and Scientific Research (JNICT)

### Industrial, Affiliate, and Consulting Positions

1996	Founding Partner of the company: "SENGIC, Lda."
1993 - 1995	Technical Director of the Company: "SOLCOA, S.A."
1990 - 1991	Independent worker

**Appointments**

2016 - --	President of the M23 Jury, for the "special competition" for non-traditional university entrants, called M23 (targeted at people aged over 23), for the Engineering courses of ESTT (Escola Superior de Tecnologia de Tomar)
2014 - --	Director of the Master Course in Electrical Engineering (IPT)
2012 - --	Member of the Coordination Committee of the Postgraduate in Mechatronics Engineering
2012 - --	Founding member of VITA.ipt
2011 - --	Member of Technical-Scientific Council of ESTT ( <i>Escola Superior de Tecnologia de Tomar</i> )
2011 - --	Member of the Engineering Department Council
2009 - 2014	Director of the Master Course in Control and Industrial Electronics (IPT)
2010 - --	Member of the Coordination Committee of the B.Sc Computer and Electrical Engineering
2009 - --	Member of the General Council of IPT
2009 - --	Member of the Coordination Committee of the Master in Technical Maintenance of Buildings
2009 - --	Head of Systems and Control Laboratory
2009 - 2010	President of Coordination Committee of the Master Course in Control and Industrial Electronics
2008 - 2011	President of Evaluation Committee for Integration and Accreditation of Academic Education of DEE ( <i>Electric Engineering Department</i> )
2008 - 2011	Member of the Verification Committee of the Academic Education Plan of DEE
2006	Head of Technology Audits of the DEE, in ISM Project (Nersant)
2005 - 2010	Scientific Coordinator of the B.Sc. in Electrical and Computer Engineering
2004 - 2005	Adjunct of the Electrical Engineering Department Director
1999 - 2011	Member of Scientific Council of ESTT ( <i>Escola Superior de Tecnologia de Tomar</i> )
1996 - 2011	Member of the Department Council of DEE
1996 - 2011	Head of Control and Automation Scientific Area – DEE/IPT
1996 - 2000	Head of Automation and Control Laboratory

**Membership**

- Member of IEEE (Institute of Electrical and Electronics Engineers)
- Member of the Order of Engineers (*Portuguese Association*)

**Awards and distinctions**

- "**Engineering prize**" (best robot design - BlueT) award in the national Portuguese Micro-robot contest 2000 (University of Aveiro - May 2000), attributed by an international jury. And 5th classified in the mobile robot navigation competition. Participation of 29 teams. The team ("BlueT") was

composed by students (Paulo Ferreira, Fernando Sousa, Paulo Inácio, Ezequiel Bráz) and teachers (Paulo Coelho and Gabriel Pires) from IPT.

## Area of Scientific Activity

- Electrical Engineering. The principal research interests are: control theory, intelligent control systems, renewable energies, smart grids/cities, wheeled mobile robotics, aerial robotics, intelligent vehicles and mechatronics, namely on: kinematics and dynamics of WMRs, Path-Following, environment perception, autonomous navigation, sensor fusion, motion control of mobile robots, integration of renewable energy in autonomous and semi-autonomous vehicle and in smart grids/cities, and ambient-assisted living.

## M.Sc. Students Supervising

- Pedro Miguel Sá das Neves, M.Sc. Thesis: *Kits Didáticos de Controlo e Sistemas*, (2016 - --).
- Filipe Alexandre Guido Bandejas, M.Sc. Thesis: *Microrredes industriais: arquiteturas e protocolos de consumo nulo de energia*, (2016 - --).
- Tiago Filipe Dias Cascalheira, M.Sc. Thesis developed in Training Period: *EDP Distribuição – Energia S.A.*, (2016 - --).
- José Rafael da Costa Batista, M.Sc. Thesis: *Kit Ball and Beam - B&B II*, (2015 - --).
- Tiago Miguel de Sousa Carvalho, M.Sc. Thesis: *Energias Renováveis-Armazenamento e arquitectura da rede de comunicações em Microrredes industriais*, (2015 - --).
- Ricardo Raimundo Silvestre, M.Sc. Thesis: *Energias Renováveis- Caracterização da rede de energia em Microrredes industriais*, (2015 - -).
- Paulo Alexandre Sousa Coutinho, M.Sc. Thesis: *Veículo Robotizado*, (2015 - --).
- Odair Patrick Coimbra Dos Reis, , M.Sc. Thesis: *Interface Gráfica para Monitorização e Controlo de uma Instalação de Iluminação Inteligente*, (2014 - --).
- Luís Filipe Simões Godinho Lopes, M.Sc. Thesis: *Desenvolvimento de aplicação/hardware de controlo da iluminação do Bloco I*, (2014 - --).
- Tiago Alexandre Martins Fernandes, M.Sc. Thesis: *SISGE - Sistema Integrado de Segurança e Gestão de Energia*, (2013 - 2015). 12/2015
- Carlos Alberto da Conceição Pereira, M.Sc. Thesis developed in Training Period: - *Critical-Kinetics, Lda.*, (2012 - 2015). 12/2015
- Júlio Cesar Moita Jorge Ruivo da Silva, M.Sc. Thesis: *Web Domotic Control – Soluções Inteligentes de Monitorização*, (2012 - --)
- David Sérgio de Oliveira Peneireiro, M.Sc. Thesis developed in Training Period: - *RenPad (Renova, S.A)*, (2012 - 2014). 12/2014
- David Nuno Da Graça Ferreira, M.Sc. Thesis developed in Training Period: - *Mitsubishi Fuso Truck Europe, S.A*, (2012 - 2014). 09/2014
- Fábio A. F. Silva, M.Sc. Thesis developed in Training Period: *Sinergiae*, (2011 - 2013). 12/2013
- Oscar C. Pires, M.Sc. Thesis developed in Training Period: *Embedded Systems Solutions - Camiões e Contentores refrigerados – Controlo de Sistemas de Refrigeração*, (2011 - 2013). 09/2013
- Marco S. M. Pedro, M.Sc. Thesis: *Sistema de Supervisão de Linhas de Produção em Série – Schaeffler Portugal*, (2010 – 2012). 12/2012

- Jorge M. R. Cunha, M.Sc. Thesis: *Desenvolvimento de Sistema de Estacionamento Automático*, (2010 - 2013). 12/2013
- Afonso D. Antunes, M.Sc. Thesis: *Desenvolvimento de Kit para Conversão de Veículos com motor a Combustão em Eléctricos*, (2010 - 2015). 12/2015
- Paulo J. M. Silva, M.Sc. Thesis: *Controlo de um Pêndulo Invertido de Base Móvel Linear*, (2009 – 2011). 11/2011
- Bruno M. F. Grácio, M.Sc. Thesis: *Análise e Implementação de métodos numéricos para resolução de sistemas de equações lineares de grandes dimensões*, (2009 - --) - *Suspended*
- António M. D. Sirgado, M.Sc. Thesis: *Simulação Dinâmica de Estratégias de Controlo*, (2009 - --) - *Suspended*
- Marco A. A. Mendes, M.Sc. Thesis: *Controlo de um Helicóptero*, (2009 - --)
- André F. M. Carrilho, M.Sc. Thesis: *Re-ajuste Simples de Malhas de Controlo por PID*, (2009 – 2011). 12/2011
- Pedro H. F. Gonçalves, M.Sc. Thesis: *Kit Didáctico Ball & Beam*, (2009 -2011). 12/2011
- Orlando M.V. Lino, M.Sc. Thesis: *Laboratório Virtual: da Instrumentação ao Controlo*, (2009 – 2011). 03/2011
- Charly R. Silva, M.Sc. Thesis: *Controlo de Motores DC, aplicado a veículos Eléctricos*, (2009 - 2011). 05/2011

#### Academic Juries

Member of more than 40 Juries of Master (as President, Examiner, or Supervisor). Not listed in this short CV.

#### Research Projects

- Member of INDUGRID: “Gestão eficiente de energia em microrredes industriais com elevada penetração de tecnologia fotovoltaica”, supported by FCT and by PIDDAC, under the research project ERANETLAC/0006/2014 (2016 - --)
- Member of RIGMEI - *Red Iberoamericana de Generación Distribuida y Microrredes Eléctricas Inteligentes* - CYTED (Red 713RT04752012). (2012 - 2016)
- Member of VITA.IPT - Life Quality – Ambient Assisted Living – IPT (2012 - --)
- Principal Investigator of HELI – Development of a Helicopter for civil protection and military applications - MCEI/IPT/03/2011 (2011 - --)
- Principal Investigator of Research project for “Development of KITS in Control, Electronics and Electrical fields” – MCEI/IPT/02/2011 (2011 - --)
- Member of Research project of “Development of a KIT to convert vehicles with combustion engines in electric vehicles” – MCEI/IPT/01/2011 (2011 - 2015)
- Principal Investigator of Research project for “Building, Simulating and Programming a Wheeled Mobile Robot” – DEE/IPT/02/2006 (2006-2007)
- Member of Research project GreEn Power – DEE/IPT/01/2006 (2006-2010)
- Member of NCT04: Nonlinear control techniques applied in path following of WMRs and autonomous, vehicles with high precision localization system. FCT and POSI, project POSI/EEASRI/58016/2004 (2005-2008)
- Member of TSM02: Trajectory planning and tracking of mechanical systems with nonholonomic constraints, Project POSI, project POSI/41618/SRI/2001 (2002-2005)

- Member of CTR2001: Robot Force and Motion Control, Linking Sensory and Intelligent Levels, Project POSI, project POSI/33594/SRI/2000 (2001-2004)
- Member of MENTOR: Teaching and Exploratory Skill Learning Methods for Human-Oriented Robots, Project PRAXIS, project PRAXIS/P/EEI/13141/1998 (1999-2001)

### Research Projects in Collaboration with Industries

- Member of Research project of "Software Flowmeter 2000" – Software development in Delphi 4, to measure and control flow rates, taking into account the different types of tubes and diaphragms, among other restrictions. Partners: DEE-ESTT-IPT, "Alcântara- refinarias Açucares S.A" (Industry) (1999-2000)

### Refereeing Activity

#### *Referee for the following journals:*

- Machine Intelligence & Robotic Control (MIROC), Cyber Scientific, Japan
- IEEE Transactions on Robotics
- IEEE Transactions on Automatic Control
- IEE/IET Control Theory & Applications.
- Mechatronics (The Science of Intelligent Machines), IFAC
- International Journal of Control, Elsevier
- International Journal of Hydrogen Energy, Elsevier
- UIS Ingenierías, Colombia

#### *Referee for the following conference:*

- ICREGA'16 – 4th International Conference on Renewable Energy: Generation and Applications UTBM, February 8-10, 2016, Belfort, France
- SBAI 2007 - Simpósio Brasileiro de Automação Inteligente, October 8-11, 2007, Florianópolis - Santa Catarina, Brazil
- IROS 2005 - IEEE/RSJ International Conference on Intelligent Robots and Systems, 2005.
- IAV2004–5th IFAC/EURON Symposium on Intelligent Autonomous Vehicles. July 5-7, 2004, Lisboa, Portugal.
- SICICA 2003 – 5th Ifac International Symposium on Intelligent Components and Instruments for Control Applications, July 9-11, 2003, Aveiro, Portugal.

### Teaching

#### Lecturer at IPT

#### *M.Sc. in Electrical Engineering (Control and Industrial Electronics)*

- Digital Control
- Optimal and Adaptive Control

#### *M.Sc. in Chemical Technology*

- Energy and Environment (\*)
- Dynamics and Control of Processes

***M.Sc. in Technical Maintenance of Buildings***

- Control Systems and Domotics (\*)

***M.Sc. in Urban Rehabilitation***

- Technical Installations I (Domotics) (\*)

***B.Sc. in Computer and Electrical Engineering***

- Control Theory
- Systems Theory
- Engineering Laboratories
- Mobile and Autonomous Robotics (\*)
- Automatic Control (\*)
- CAD/CAM (\*)
- Signals and Systems I (\*)
- Special Installations and Domotics (\*)
- Industrial Automation (\*)
- Telecommunications and Integrated Networks (\*)
- Digital Systems (\*)
- Complements of Electronics (\*)
- Signal Theory (\*)
- Microelectronics (\*)
- Computational Methods in Design and Manufacturing - CAD/CAM (\*)
- Control and Automation II (\*)
- Telecommunications Systems (\*)

***B.Sc. In Informatics Engineering***

- Introduction to Telecommunications (\*)
- Control and Automation (\*)
- CAD/CAM (\*)
- Signals and Systems (\*)

***B.Sc in Mechanical Engineering***

- Systems Control and Robotics (\*)

***CET in Electrical Installations and Industrial Automation***

- Industrial Automation (\*)

(\*) – Past Courses

**Short Courses**

- Mobile Robotics for teachers'16 - (16 hours), ref: CCPFC/ACC-81469, IPT, Feb. 2016
- Mobile Robotics for teachers'15 - (16 hours), ref: CCPFC/ACC-81469, IPT, Feb. 2015
- Distributed Generation and Micro Smart Grids - (18 hours), ref: CCPFC/ACC-77843/14, IPT, July 2014.
- Brief formation in CNC Machines - (4 hours), IPT, July 2006
- CAD/CAM, (FOCO course) - (24 hours), IPT, May 1999

- Digital Systems and Microprocessors (FOCO Course)–(16 hours), IPT, June 1999
- Software Applications (FOCO course) - (32 hours), IPT, March/April 1999
- Introduction to R.I.T.A. projects - (8 hours), IPT, July 1999

## Publications

### Thesis

Paulo Manuel Machado Coelho, "Path following control of wheeled mobile robots in presence of uncertainties" (in Portuguese), Ph.D. Thesis, University of Coimbra, 2004

Paulo Manuel Machado Coelho, "Computerized Control of Industrial Processes" (in Portuguese), M.Sc. Thesis, University of Coimbra, 1995

P. Coelho, J. Anastácio, J. Fernandes, "Integrated Fault Diagnostics System - Digital Filter" (in Portuguese), "Licenciatura" graduation (5 years programme) Thesis, University of Coimbra, 1990

### Book (editor)

M. Castilla, M. Gomes, P. Coelho, J. Fernandes, editors, "2.as Jornadas Ibero-Americanas: Geração Distribuída e Microredes Eléctricas Inteligentes", Vol.1, Editor IPT, 2014 (ISBN: 978-972-9473-82-1)

### Book Chapters

U. Nunes, G. Pires, P. Coelho, "Assistive Navigation Control Architecture", in Book: System and Control: Theory and Applications, World Scientific and Engineering Society (WSES)- Press, 2000

### International Journals

Pereira, C., Coelho, P., Fernandes, J., Gomes, M. (2017). Study of an energy mix for the production of hydrogen, *International Journal of Hydrogen Energy (IJHE)*, vol. 42 (2017), pp. 1375-1382.

P. Coelho and U. Nunes, "Path Following Control of Mobile Robots in Presence of Uncertainties", *IEEE Trans. on Robotics*, vol. 21, n. 2, April 2005, pp. 252-261

P. Coelho and U. Nunes, "Lie algebra application to mobile robot control: a tutorial", *Robotica*, Cambridge University Press, vol. 21(5), 2003, pp. 483-493

### National Journals

P. Coelho e U. Nunes, "Mobile Robots Dynamics: Robotic Wheelchair" (in Portuguese), *Ingenium*, 2º Série, Nº 77, September 2003, pp. 70-73

### Conferences, Seminars and Workshops

Pereira, C., Coelho, P., Fernandes, J., Gomes, M. (2016). Energy Mix in the Production of Hydrogen. In *Proceedings of International Conference on Renewable Energy 2016 (ICREGA'16)*, paper ID: SS1004-ID132, Belford, France, 8-10 February 2016.

Coelho, P., Gomes, M., Fernandes, J. (2016). Redes Eléctricas Inteligentes: Conceptos y Desafíos. In *Proceedings of Cuartas Jornadas Iberoamericanas de Generación Distribuída y Microrredes Eléctricas Inteligentes*, Bucaramanga, Colombia, 13-16 junho 2016.

Gomes, M., Coelho, P., Fernandes, J. (2016). Mercados de Energia Eléctrica: Fundamentos e Aplicação. In *Proceedings of Cuartas Jornadas Iberoamericanas de Generación Distribuída y Microrredes Eléctricas Inteligentes*, Bucaramanga, Colombia, 13-16 junho 2016.

José Lopes, Mário Gomes, Paulo Coelho, José Fernandes (2016). "A Mudança para o LED no Hotel dos Templários". In *Semana da Engenharia – Desenvolvimento Sustentável para o Entendimento Global*, Tomar, Portugal, 11 – 14, April, 2016

P. Coelho, M. Gomes, and J. Fernandes, "Integración de tecnologías en las comunidades", Proceedings of the Encuentro Internacional de Sustentabilidad y Tecnologías Aplicadas a la Comunidad (Patrimonio y Micro Redes Eléctricas), Santiago do Chile, Chile, June 30 – July 2, 2015

M. Gomes, P. Coelho, and J. Fernandes, "Modelo de funcionamiento de micro grids en ambiente competitivo", Proceedings of the Encuentro Internacional de Sustentabilidad y Tecnologías Aplicadas a la Comunidad (Patrimonio y Micro Redes Eléctricas), Santiago do Chile, Chile, June 30 – July 2, 2015

Coelho, P., Guilherme, J., Barros, M., (2015). Drone Inteligente com Sistema GPS. In Fórum da Inovação e do Empreendedorismo, Convento de S. Francisco, Santarém, Portugal, 21 -22 de maio 2015.

M. Gomes, P. Coelho, J. Fernandes, "Projeto RIGMEI". Workshop de Sustentabilidade, Tomar-Portugal, 25-26 March 2015

J. Cunha, P. Coelho, A. Lopes, G. Pires, "Sistema de Estacionamento Paralelo Automático", Proceedings of the 2as Jornadas Ibero-Americanas em Geração Distribuída e Microrredes Eléctricas Inteligentes (RIGMEI), Tomar-Portugal, July 2014

A. Antunes, P. Coelho, J. Fernandes, "Desenvolvimento kit conversão elétrica", Proceedings of the 2as Jornadas Ibero-Americanas em Geração Distribuída e Microrredes Eléctricas Inteligentes (RIGMEI), Tomar-Portugal, July 2014

M. Mendes, P. Coelho, M. Barros, "Controlo de um Quadcopter", Proceedings of the 2as Jornadas Ibero-Americanas em Geração Distribuída e Microrredes Eléctricas Inteligentes (RIGMEI), Tomar-Portugal, July 2014

P. Coutinho, M. Francisco, M. Gomes, O. Reis, M. Gomes, P. Coelho, "Organização e Funcionamento dos Mercados de Eletricidade", Proceedings of the, 2as Jornadas Ibero-Americanas em Geração Distribuída e Microrredes Eléctricas Inteligentes (RIGMEI), Tomar-Portugal, July 2014

L. Lopes, P. Coelho, J. Fernandes, M. Gomes, "Controlo Inteligente da Iluminação", Proceedings of the 2as Jornadas Ibero-Americanas em Geração Distribuída e Microrredes Eléctricas Inteligentes (RIGMEI), Tomar-Portugal, July 2014

M. Gomes, P. Coelho, J. Fernandes, "Serviços auxiliares alocados a microrredes integradas em mercados eléctricos", Proceedings of the 2as Jornadas Ibero-Americanas em Geração Distribuída e Microrredes Eléctricas Inteligentes (RIGMEI), Tomar-Portugal, July 2014

M. Gomes, P. Coelho, J. Fernandes, "Relatório RIGMEI 2013 – Portugal", Proceedings of the 1as Jornadas Ibero-Americanas em Geração Distribuída e Microrredes Eléctricas Inteligentes (RIGMEI), Mérida-Venezuela, 14 October 2013

M. Gomes and P. Coelho, "Energy Efficiency Measures in Industry" (in Portuguese)– Seminar of Chemical Engineering: Energy Optimization in Industry – Instituto Politécnico de Tomar – 17 May 2012

J.Fernandes, C.Ferreira, P.Granchinho, P.Coelho, "On-going projects on DEE-IPT related to renewable energy", European Meeting Point: Energy for Development 2007, Beja, Portugal, 11-12 October, 2007

P. Coelho and U. Nunes, "Path Following Control of a Robotic Wheelchair", Proceedings of IAV2004- 5th IFAC/EURON Symposium on Intelligent Autonomous Vehicles, Lisbon, 2004

U. Nunes, P. Coelho, "Mobile Robots: Dynamics and Trajectory Control" (in Portuguese), proceedings of 2<sup>nd</sup> Symposium on Physics of IPT, Tomar, pp. 99-132, 2001

U. Nunes, R. Cortesão, J. L. Cruz, P. Coelho, "Shared-Control Architecture: concepts and experiments", Proceedings of 14th European Conference on Artificial Intelligence (ECAI 2000) – Workshop W20 "Service Robotics", Berlin, Germany, pp. 21-26, 2000

U. Nunes, G. Pires, P. Coelho, "Assistive Navigation Control Architecture", Proceedings of 4<sup>th</sup> World Multiconference on Circuits, Systems, Communications & Computers (CSCC 2000), Athens, Greece, pp. 4581-4587, 2000



**Invited Talks**

- P. Coelho, "Introduction to Robotics: Applications" (in Portuguese), Escolher Robótica, Escolher Ciência! program, Escola Secundária de Jácome Ratton –Tomar, 17 April 2013
- P. Coelho, "Introduction to Robotics: Applications" (in Portuguese), Escolher Robótica, Escolher Ciência! Program, Escola Básica e Secundária de Ourém, 13 March 2013
- P. Coelho, "Introduction to Robotics: Applications" (in Portuguese), Escolher Robótica, Escolher Ciência! program, Escola Secundária de Maria Lamas –Torres Novas, 13 March 2013
- P. Coelho, P. Neves, R. Oliveira, "Robótica", Seminário integrado no dia Aberto da Escola Profissional Torres Novas, Torres Novas, 22 March 2012
- P. Coelho, "Introduction to Robotics" (in Portuguese), Ciência Viva program - Robot ChampionChip 2012, Tomar, 9 July 2012
- P. Coelho, "Control... and its applications" (in Portuguese), FCCT09 (Festa da Ciência, Cultura e Tecnologia 2009), Tomar, April 2009
- P. Coelho, "Robotics" (in Portuguese), FCCT08 (Festa da Ciência, Cultura e Tecnologia 2008), Tomar, April 2008
- P. Coelho – "Results of the Technology Audit performed to the Company Ferplay Fabrica de Portões, Lda" (in Portuguese), Tremês, November 2006
- P. Coelho – "Results of the Technology Audit performed to the Company Nicolau de Freitas, Lda" (in Portuguese), Torres Novas, November 2006

**Technical Reports**

- P. Coelho e J. Guilherme, "Technology Audit performed to the Company Nicolau de Freitas, Lda" (in Portuguese), IPT, Tomar 2006
- J. Guilherme, J. Carvalheiro e P. Coelho, "Technology Audit performed to the Company JS Gouveia, Lda" (in Portuguese), IPT, Tomar 2006
- J. Guilherme, F. Nunes e P. Coelho, "Technology Audit performed to the Company Jorge Honório da Silva & Filhos, Lda" (in Portuguese), IPT, Tomar 2006
- J. Carvalheiro, F. Nunes e P. Coelho, "Technology Audit performed to the Company Ferplay Fábrica de Portões, Lda" (in Portuguese), IPT, Tomar 2006
- P.Coelho, U. Nunes, "Lie Algebra Application in Control of Mobile Robotics" (in Portuguese), Technical Report n.º ISR-LCIR-2002/01, ISR – University of Coimbra, 09/2002, (26 pages)
- P. Coelho, "Vehicles Kinematics" (in Portuguese), ISR – University of Coimbra, 11/2001, (10 pages)
- P. Coelho, "Lagrangian Application in wheeled Mobile Robots Dynamics" (in Portuguese), Technical Report n.º ISR-LCIR-2001/01, ISR – University of Coimbra, 05/2001, (38 pages)
- P. Coelho, "Kinematics of Mobile Robots" (in Portuguese), Technical Report, ISR – University of Coimbra, 01/2000, (50 pages)
- P. Coelho, "Control and Measurements Instruments" (in Portuguese), Technical Report, DEQ- FCTUC, Coimbra, 1992, (15 pages)
- P. Coelho, "Production Management" (in Portuguese), Technical Report, FCTUC, Coimbra, 1991, (50 pages)

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