

## BERTHA MARIA BATISTA DOS SANTOS

Universidade da Beira Interior, Faculdade de Engenharia, Calçada Fonte do Lameiro, 6201-001 Covilhã, Portugal  
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Birthday: 01/August/1973

### EDUCATION

University of Beira Interior (UBI), Portugal

#### **Ph.D. in Civil Engineering**

**2008**

Dissertation: Modelação dos Custos dos Utentes na Gestão da Estrada | Modeling Road User Costs in Road Management  
Scientific advisors: Prof. Doutor Luís Picado Santos, Prof. Doutor Victor Cavaleiro

University of Coimbra (UC), Portugal

#### **M.Sc. in Civil Engineering**

**2002**

Thesis: Implementação de um Sistema de Gestão da Conservação de Pavimentos Rodoviários para a Cidade de Lisboa | Implementation of a Management System of Road Pavements Conservation for the City of Lisbon  
Scientific advisor: Prof. Doutor Luís Picado Santos

University of Beira Interior (UBI), Portugal

#### **University Degree (5 years) in Civil Engineering**

**1997**

Thesis: Reordenamento do Eixo Viário de acesso à Covilhã | A New Planning approach for the main road net accessing Covilhã City  
Scientific advisor: Prof. Doutor José Gomes Mendes

### TEACHING EXPERIENCE

University of Beira Interior (UBI), Portugal

**Assistant Professor (2008 to date) / Lecturer (1998-2008) – UBI, Portugal**

**1998-to date**

Courses and curricular units taught:

1st Degree and Master Degree in Civil Engineering: Roads (design), Topography, Traffic Engineering, Seminar Project, Complements of Roads (earthworks, pavements, drainage, road maintenance, road signs and safety), Dissertation (Master Thesis Adviser).

Master Degree in Architecture: Geographic Information Systems (GIS).

Master Degree in Geographic Information Systems: GIS Based Road Management, Dissertation (Master Thesis Adviser).

Master Degree in Applied Geotechnics: Transport Infrastructures Earthworks and Paving.

### RELATED EXPERIENCE

Member of the Faculty of Engineering Council-UBI

**2009 – 2013**

Director of the Master Course: Geographic Information Systems-UBI

**2009 – 2013**

Course Committee member: 1rs and Master Degree in Civil Engineering and GIS Master Degree-UBI

**2008 – to date**

Civil Engineering and Architecture Scientific Committee Course member-UBI

**2008 – to date**

Group Coordinator of Planning and Urban Planning subjects-UBI

**2008 – 2009**

Experience as scientific adviser in 14 Master Thesis (concluded)-UBI in the field of road design, operation conditions, maintenance, management, safety, accessibility, public transport and GIS applications.

**2008 – 2015**

Member of 10 International Conference Technical Committees

**2008 – 2015**

### PAPERS AND PUBLICATIONS

#### **"The Pavement Management System for Lisbon"**

Luís Picado-Santos, Adelino Ferreira, António Antunes, Carmen Carvalheira, Bertha Santos, Maria Helena Bicho, Isabel Quadrado, Sofia Silvestre, ICE-Municipal Engineer, Journal of Institution of Civil Engineers, Volume 157, Issue 3, Pages 157-165.

<http://www.icevirtuallibrary.com/content/article/10.1680/muen.2004.157.3.157>

**2004**

#### **"A simplified road user costs model for Portuguese highways"**

Bertha Santos, Luís Picado-Santos e Victor Cavaleiro, Transportation Research Record (TRB): Journal of the Transportation Research Board, Volume 2225, Pages 3-10.

<http://trb.metapress.com/content/9q3002hx4ju277r/>

**2011**

**“Vehicle operating, accident and user time costs in pavement management systems: Approach for Portuguese conditions”**

Bertha Santos, Luís Picado-Santos e Victor Cavaleiro, Journal of Civil Engineering and Architecture, Volume 5, Number 8, Pages 723-731.

<http://www.davidpublishing.com/davidpublishing/Upfile/4/4/2012/2012040470514169.pdf>

2011

**“Refinement of a simplified road user cost model”**

Bertha Santos, Luís Picado-Santos e Victor Cavaleiro, Proceedings of the Institution of Civil Engineers (ICE): Transport (ISSN : 0965-092X, E-ISSN : 1751-7710), Volume 167, Issue 6, pages 364-376.

<http://www.icevirtuallibrary.com/content/article/10.1680/tran.12.00057>

2014

**“Aplicação de Sistemas de Informação Geográfica (SIG) em Sistemas de Informação ao Cliente de Transportes Públicos: O futuro dos transportes”**

Inês Ferraz, Bertha Santos e Jorge Gonçalves, ENGenharia – Revista Técnica de Engenharia da Ordem dos Engenheiros Técnicos, Ed. N.º 7, págs. 9-17.

[https://www.oet.pt/downloads/Revista/Rev\\_ENG7.pdf](https://www.oet.pt/downloads/Revista/Rev_ENG7.pdf)

2014

More than 25 papers in international conference proceedings.

Participation in more than 35 conferences and seminars.

## PARTICIPATION IN R&amp;D PROJECTS

Road Pavement Management Systems: A Segment-linked Optimisation Tool - POCTI/ECM/32909/99, FCT funding, team member (50%).

A Deterministic Segment-Linked Pavement Management System - POCTI/ECM/46461/2002, FCT funding, team member (20%).

Participation in the Scientific Study on the Attractiveness of Public Transport, IT - Portuguese Network for Territorial Development, Nov. 2013-2015.

## AWARDS

**PARKMAN MEDAL** 2005, ICE – Institution of Civil Engineers - «(...) best paper published by the Institution on the practical aspects of control or management (...): Luís Picado-Santos, Adelino Ferreira, António Antunes, Carmen Carvalheira, Bertha Santos, Maria Helena Bicho, Isabel Quadrado, Sofia Silvestre, "The Pavement Management System for Lisbon", ICE-Municipal Engineer, Journal of Institution of Civil Engineers , Volume 157, Issue 3, Pages 157-165, September 1st, 2004.

2005

**2º PRÉMIO DA 3ª EDIÇÃO DO CONCURSO “MAIS VALE PERDER UM MINUTO NA VIDA, DO QUE A VIDA NUM MINUTO!”** da Fundação da Juventude. Professora Coordenadora do Projeto “A sinistralidade rodoviária e os troços em obras”, da autoria de Adelaide Ajú e Ana Rita Silva, da Universidade da Beira Interior e de Camila Vedana, da Universidade do Estado de Mato Grosso, alunas da Unidade Curricular de Complementos de Vias de Comunicação da Universidade da Beira Interior, 2013.

2013

## LANGUAGES

Portuguese and Spanish – native language

English – speak fluently and read/write with high proficiency

## MEMBERSHIPS

Senior member of the Portuguese Order of the Engineers (OE).

Specialist in Transport and Roads awarded by the Portuguese Order of the Engineers (OE).

Collaborator member in 2 Portuguese research centers – 2009/to date: CESUR (Center for Urban and Regional Systems, IST) and GeoBioTec (Geobiociências, Geoengenharias e Geotecnologias).

Regular member of iSMARTI.

Member of the Research Group on Roads (GIV).

Member of the Agência Independente da Mobilidade (AIMob).

## OTHER ACTIVITIES

Consultant in several mobility studies and other activities – some examples:

Member of the Independent Agency for Mobility (AIMob) with collaboration in the development of the Scientific Study on the **Attractiveness of Public Transport**, IT - Portuguese Network for Territorial Development.

2013 – to date

Study: “Caracterização sumária dos níveis e motivos de mobilidade gerada e atraída para as várias zonas do concelho do Porto | Brief description of levels and generated and attracted mobility motives to the various areas of the municipality of Porto”, Instituto da Construção, FEUP.

2014

Member of the Municipal Master Plan of Figueira de Castelo Rodrigo Scientific Team, responsible for **Transport area**.

2014 – to date

**Coordinator of the Mobility Specialized Committee for IT** - Portuguese Network for Territorial Development.

2015