

SCIENTIFIC CURRICULUM VITAE | August 2013

Dr Rafael Toledo-Moreo

TABLE OF CONTENTS

1. PERSONAL DATA	3
2. POSITIONS.....	3
3. RESEARCH INTERESTS	3
4. EDUCATION	3
5. HONORS.....	3
6. TEACHING.....	4
7. FUNDED PROJECTS	5
8. PUBLICATIONS	13
9. CONFERENCES AND WORKSHOPS	17
10. SCIENTIFIC COMMITTEES	26
11. ORGANIZING COMMITTEES.....	29
12. SCIENTIFIC STAYS ABROAD	30

1. PERSONAL DATA

Full name: Rafael Toledo-Moreo

Year of birth: 1978

Languages: Spanish, Mother tongue; English, Fluent; French, Intermediate

Address: Dpto. Electrónica, Tecnología de Computadoras y Proyectos,

Escuela Técnica Superior de Ingenieros de Telecomunicación

Campus Muralla del Mar, Cuartel de Antigones, 30202. Cartagena, SPAIN.

ph: 34 968325948 fax: 34 968326400

email: rafael.toledo@upct.es

2. POSITIONS

Associate Professor (Profesor Titular de Universidad) with the Universidad Politécnica de Cartagena

Secretary of the School of Telecommunication Engineering with the Universidad Politécnica de Cartagena

Member of the research group: "Electronic Design and Signal Processing Techniques"

<http://www.detcp.upct.es/>

Member of the research group: "Intelligent Systems and Telematics" with the Universidad de Murcia

http://libra.inf.um.es/ants_vehicles/

Spanish Project Manager of the ESA Space Mission Euclid Consortium at the NISP Instrument level

<http://sci.esa.int/euclid/>

3. RESEARCH INTERESTS

Navigation: Intelligent Transportation Systems, Mobility, Navigation Systems, Global Navigation Satellite Systems, Inertial Navigation, Digital Maps, Geographical Information Systems, Data Fusion, Kalman Filtering, Particle Filtering, Advanced Driver Assistance Systems, Location Based Systems, etc.

Electronic Design: Electronics, Microprocessors, Reconfigurable Computing, Design with FPGA

4. EDUCATION

European PhD. Degree in Computer Science in 2006

MS in Electronics and Automation Engineering in 2002

5. HONORS

Awards

Award-winner as one of the European "100 Young Creative Talents" for "the contributions in his field of expertise and his creative potential in science, research and innovation". The conquest was organized by the Committee of Regions of the European Union. The candidacy was nominated by the Regional Authority for Institutional and International Affairs and supported by the President of the Region of Murcia. April 2009.

Award-winner in the 6th International Award for young researchers “Jordi Viñas i Folch” to the best research work for “Interactive Multiple Model based Low Cost IMU/GPS Navigation and Maneuver Detection in Road Vehicles”. February 2007.

Public Media Recognition

Award-winner “Importantes 2008”. This award is granted every ten years by the regional newspaper “La Opinión” to ten youngsters born in the Region of Murcia as acknowledgment for their prominent careers and contributions to their fields of work. December 2008.

Academia

Award-winner for Best Academic Curriculum of MS in Electronics and Automation Engineering. 2002.

Award-winner for Best Academic Curriculum of Graduate in Electronics Engineering. 1999.

Award-winner for Best Final Degree Project of Graduate in Electronics Engineering. 1999.

6. TEACHING

Lecturer with the Dept. of Electronics and Computer Technology, Universidad Politécnica de Cartagena, since 2005. Lectures on Computer Architecture, Fundamentals of Computers, Microprocessor-based Digital Systems, Electronic Digital Systems. Schools of Telecommunication and Industrial Engineering.

Lectures at the Phd program on New Technologies on Computer Science, Universidad de Murcia, since 2010. Lectures on Mobility based Systems and Sensor Technologies for Heterogeneous Environments. Faculty of Computer Science.

7. FUNDED PROJECTS

International Research Projects

Project Title: SaPPART (Satellite Positioning Performance Assessment for Road Transport) COST Action TU1302.
Founded by: European Commission
Participants: Austria, Switzerland, Czech Republic, Germany, Denmark, Spain, Finland, France, Croatia, Italy, The Netherlands, Sweden, Turkey, UK.
Duration: since: 01/01/2014 until: 31/12/2017
Responsible researcher: Rafael Toledo-Moreo at the Universidad Politécnica de Cartagena
Number of researchers: 53
BUDGET: 129.000 € for the first year, the rest subject to availability at the COST office.

Project Title: PELGRIN: Protection of Electrical Grid Infrastructures Programme "Prevention, Preparedness and Consequence Management of Terrorism and other security related risks". Action grants CIPS 2009 II.
Founded by: European Commission
Participants: INDRA Sistemas, Unión Fenosa Distribución S.A., University of Murcia, CNPIC, IP Sistemas and GAS Natural.
Duration: since: 01/11/2010 until: 31/07/2011
Responsible researcher: Rafael Toledo-Moreo and Antonio F. Gómez Skarmeta with the University
Number of researchers: 5 with the Univ. of Murcia
BUDGET:

Project Title: CVIS: Cooperative Vehicle Infrastructure Systems Integrated Project (IP) of the VI Frame Program (IST-2004-027293).
Founded by: EC project funding: 21.905.795 €
Participants: 61 partners, including LCPC
Duration: since: 01/02/2006 until: 31/01/2010
Responsible researcher: Francois Peyret with LCPC
Number of researchers: 4 with the LCPC
BUDGET: 41 million €

Project Title: GNSS Introduction in the Road Sector – GIROADS (GJU/05/2408/CTR/GIROADS). VI Frame Program in Aeronautics and Space European Space Agency (ESA) & Galileo Joint Undertaking (GJU)
Founded by: European Space Agency (ESA) & Galileo Joint Undertaking (GJU)
Participants: Universidad de Murcia and 30 Public and Private Institutions.
Duration: since: 12/09/2005 until: 11/09/2007
Responsible researcher: Antonio Fernando Gómez Skarmeta
Number of researchers: 4 with the UMU
BUDGET: 3.200.000 €

Contracts and Research Projects founded by Spanish Institutions

Project Title: Participación en la carga útil y centro de procesamiento de datos del satélite Euclid: Fase de diseño y modelos de calificación de la ICU
Founded by: Ministerio de Ciencia e Innovación
Participants: Universidad Politécnica de Cartagena
Duration: since: 01/01/2013 until: 31/12/2013
Responsible researcher: Rafael Toledo Moreo
Number of researchers: 9
BUDGET: 541.710 €

Project Title: Diseño Preliminar de la Electrónica de Control del Instrumento NISP de la Misión Espacial Euclid.
Founded by: Ministerio de Ciencia e Innovación
Participants: Universidad Politécnica de Cartagena
Duration: since: 20/10/2011 until: 25/10/2013
Responsible researcher: Rafael Toledo Moreo
Number of researchers: 8
BUDGET: 120.000 €

Project Title: Definición de la Electrónica de Control del Instrumento NISP de la Misión Espacial Euclid
Founded by: Ministerio de Ciencia e Innovación
Participants: Universidad Politécnica de Cartagena
Duration: since: 20/10/2011 until: 19/10/2012
Responsible researcher: Rafael Toledo Moreo
Number of researchers: 5
BUDGET: 25.600 €

Project Title: Neuromorphic Systems for Low Vision Aids (TIN2009-08541-E)
Founded by: Ministerio de Ciencia e Innovación
Participants: Universidad Politécnica de Cartagena
Duration: since: 01/01/2010 until: 01/01/2011
Responsible researcher: Jose Manuel Ferrández Vicente
Number of researchers: 5
BUDGET: 5000 €

Project Title: Infraestructura de Servicios Ubicuos y de Comunicaciones en Redes Vehiculares (TIN2008-06441-C02-02)
Founded by: Ministerio de Educación y Ciencia
Participants: Universidad de Murcia
Duration: since: 01/01/2009 until: 31/12/2011
Responsible researcher: Antonio Fernando Gómez Skarmeta
Number of researchers: 20
BUDGET: €

Project Title: Análisis y desarrollo de los protocolos de integración. Dando soporte en el desarrollo del sistema completo y en la realización de las pruebas de integración. Contrato para la realización de trabajos de investigación (2589/09ETCP-P)

Founded by: Aquiline Computer S.L.

Participants: Universidad Politécnica de Cartagena

Duration: since: 01/01/2009 until: 31/12/2011

Responsible researcher: Francisco Javier Guerrero

Number of researchers: 5

BUDGET: 121800 €

Project Title: Análisis y desarrollo de los protocolos de integración. Dando soporte en el desarrollo del sistema completo y en la realización de las pruebas de integración. Contrato para la realización de trabajos de investigación (2591/09ETCP-P)

Founded by: Finsater S.L.

Participants: Universidad Politécnica de Cartagena

Duration: since: 01/01/2009 until: 31/12/2011

Responsible researcher: Francisco Javier Guerrero

Number of researchers: 5

BUDGET: 34800 €

Project Title: Análisis y desarrollo de los protocolos de integración. Dando soporte en el desarrollo del sistema completo y en la realización de las pruebas de integración. Contrato para la realización de trabajos de investigación (2593/09ETCP-P)

Founded by: Omega Seguridad y Sistemas S.L.

Participants: Universidad Politécnica de Cartagena

Duration: since: 01/01/2009 until: 31/12/2011

Responsible researcher: Francisco Javier Guerrero

Number of researchers: 5

BUDGET: 34800 €

Project Title: Análisis, Estudio y Desarrollo de Sistemas Inteligentes y Servicios Telemáticos

Founded by: Fundación Séneca

Participants: Universidad de Murcia

Duration: since: 01/01/2008 until: 31/12/2012

Responsible researcher: Antonio Fernando Gómez Skarmeta

Number of researchers: 27

BUDGET: 300.000 €

Project Title: Fusión multi-sensorial para la seguridad en el transporte de vehículos de carretera

Founded by: Agencia Española de Cooperación Internacional

Participants: Universidad Politécnica de Cartagena, Laboratoire Central des Ponts et Chaussées

Duration: since: 02/02/2008 until: 02/02/2009

Responsible researcher: Rafael Toledo Moreo

Number of researchers: 1

BUDGET: 2000 €

Project Title: Transporte Inteligente de Mercancías Intermodal (TIMI)
Founded by: Atos Origin S.A.
Participants: Universidad de Murcia and 23 Public and Private Institutions.
Duration: since: 20/03/2007 until: 31/12/2010
Responsible researcher: Antonio Fernando Gómez Skarmeta y Miguel Ángel Zamora Izquierdo
Number of researchers: 5
BUDGET: 319.000€

Project Title: Transporte Inteligente de Mercancías Intermodal (TIMI)
Founded by: Etra Investigación y Desarrollo S.A.
Participants: Universidad de Murcia and 23 Public and Private Institutions.
Duration: since: 20/03/2007 until: 20/03/2011
Responsible researcher: Antonio Fernando Gómez Skarmeta, Benito Úbeda Miñarro y Miguel Ángel Zamora Izquierdo, Mercedes Valdés.
Number of researchers: 6
BUDGET: 508.080€

Project Title: Nuevas tecnologías para la seguridad en los sistemas de transporte terrestre e identificación de vehículos.
Founded by: Ministerio de Fomento (FOM/20746/2008)
Participants: Universidad de Murcia, GRUPO ETRA
Duration: 30 months
Responsible researcher: Antonio Fernando Gómez Skarmeta
Number of researchers: 5
BUDGET: 144.778€

Project Title: SATELITES. Sistema Avanzado de Trazabilidad en Sistemas de Transporte mediante tecnologías RFID y sistemas de posicionamiento híbridos basados en GNSS
Founded by: Ministerio de Fomento (FOM/2454/2007)
Participants: Universidad de Murcia
Duration: since: 01/01/2008 until: 31/12/2010
Responsible researcher: M.A. Zamora Izquierdo y Antonio Fernando Gómez Skarmeta
Number of researchers: 5
BUDGET: 312.203€

Project Title: Viabilidad de un Sistema de precios en la red interurbana de carreteras
Founded by: CEDEX
Participants: Universidad de Murcia and T-Systems ITC Services
Duration: since: Jan 2.007 until: Jun 2.010
Responsible researcher: Antonio Fernando Gómez Skarmeta
Number of researchers: 5
BUDGET: 352.070 €

Project Title: Nuevas Tecnologías para la Seguridad en los Sistemas de Transporte Terrestre e Identificación de Vehículos. Subproyecto: Evaluación y

Prototipado de Servicios de Seguridad Activa Basadas en Tecnologías Inalámbricas e Identificación Electrónica De Coches.
 Founded by: Ministerio de Fomento
 Participants: Universidad de Murcia y Universidad Politécnica de Valencia.
 Duration: since: Dic 2005 until: Jun 2008
 Responsible researcher: Antonio Fernando Gómez Skarmeta
 Number of researchers: 4
 BUDGET: 144.778 €

Project Title: Fusión Cooperativa de Información para Coordinación y Localización de Robots
 Founded by: Ministerio de Ciencia y Tecnología (CICYT DPI2004-07993-C03-02)
 Participants: Universidad de Murcia
 Duration: since: Dic 2004 until: Dic 2007
 Responsible researcher: Humberto Martínez Barberá
 Number of researchers: 10
 BUDGET: 70.633,00 €

Project Title: Estudio sobre posible despliegue de sistemas inteligentes de transporte en España
 Founded by: Ministerio de Fomento
 Participants: Universidad de Murcia
 Duration: since: Sep 2006 until: Oct /2006
 Responsible researcher: Antonio Fernando Gómez Skarmeta
 Number of researchers: 5
 BUDGET: 25.000 €

Project Title: S-CAR: Seguridad Activa en Vehículos mediante Tecnologías Inalámbricas
 Founded by: Ministerio de educación y ciencia.
 Participants: Universidad de Murcia
 Duration: since: Jan 2005 until: Mar 2006
 Responsible researcher: Antonio Gómez Skarmeta
 Number of researchers: 5
 BUDGET: 47.815,5 €

Project Title: Análisis de Prestaciones de la Señal GLONASS y su Posible Aportación a la Mejora de Sensores GPS/EGNOS En Aplicaciones ITS
 Founded by: Ministerio de Fomento
 Participants: Universidad de Murcia
 Duration: since: Sep 2005 until: Nov 2005
 Responsible researcher: Antonio Gómez Skarmeta
 Number of researchers: 5
 BUDGET: 15.765 €

Project Title: Jornada Técnica: Modelo Alemán De Peaje Electrónico, Aspectos de Implantación y Evaluación de su Viabilidad en el Ámbito de las Infraestructuras Españolas
 Founded by: Ministerio de Fomento

Participants: Universidad de Murcia
 Duration: since: Sep 2005 until: Nov 2005
 Responsible researcher: Antonio Gómez Skarmeta
 Number of researchers: 6
 BUDGET: 17.490 €

Project Title: NAVISET: Navegación y Seguimiento en Vehículos Terrestres por Carretera: Diseño de un Sistema con Fusión Sensorial de Coste Reducido y Evaluación de un Módulo Multisensorial de Alta Integridad

Founded by: Ministerio de Fomento
 Participants: Universidad de Murcia
 Duration: since: Dic 2003 until: May 2005
 Responsible researcher: Antonio Gómez Skarmeta
 Number of researchers: 8
 BUDGET: 45.043,00 Eur.

Project Title: NAVAR-SR: Navegación de Vehículos Aéreos no Tripulados y Tracking con Cámara en Tareas de Vigilancia y Rescate

Founded by: Ministerio de Fomento
 Participants: Universidad de Murcia
 Duration: since: Ene 2.004 until: Dic 2.004
 Responsible researcher: Humberto Martínez Barberá
 Number of researchers: 8
 BUDGET: 38.000,00 Eur

Project Title: Demostrador Multimedia de Uso de la Señal de Satélites de Navegación (GPS/EGNOS/GALILEO/GLONASS) para la Gestión del Peaje Por Carretera

Founded by: Ministerio de Fomento
 Participants: Universidad de Murcia
 Duration: since: Sep 2004 until: Nov /2004
 Responsible researcher: Antonio Fernando Gómez Skarmeta
 Number of researchers: 6
 BUDGET: 12.000 €

Project Title: MIMICSII: Tecnología de Posicionamiento GNSS-I=EGNOS y GNSS-II=GALILEO en el Transporte Terrestre. Estudio de Desarrollo Electrónico e Integración ITS en Vehículo Empresa COMARTH

Founded by: Ministerio de Ciencia y Tecnología (PROFIT FIT 1602000-2001-53 y FIT-160300-2002-82)
 Participants: Universidad de Murcia
 Duration: since: Oct 2.001 until: Oct 2.004
 Responsible researcher: Antonio Gómez Skarmeta
 Number of researchers: 5
 BUDGET: 78.000,00 Eur.

Project Title: Integración de las Tecnologías Inalámbricas en el Entorno de los Sistemas Inteligentes de Transporte (ITS) y Prototipado de Unidades de Monitorización y Posicionamiento del vehículo mediante GNSS y Tecnología EGNOS

Founded by: Ministerio de Fomento
 Participants: Universidad de Murcia y Universidad de Valencia
 Duration: since: Jan 2.003 until: Jun 2.004
 Responsible researcher: Antonio Gómez Skarmeta
 Number of researchers: 5
 BUDGET: 124.335,00 Eur.

Project Title: MIMICSII. Tecnología de Posicionamiento GNSS1=EGNOS Y GNSSII=GALILEO en el Transporte Terrestre. Integración de Servicios Telemáticos de Valor Añadido

Founded by: Ministerio de Fomento
 Participants: Universidad de Murcia
 Duration: since: Jan 2003 until: Dic 2003
 Responsible researcher: Antonio Fernando Gómez Skarmeta
 Number of researchers: 5
 BUDGET: €

Project Title: Augmented Reality Systems for Low Vision Aids
 Founded by: Ministerio de Educación y Ciencia (TIN2008-01365-E/TIN)
 Participants: Universidad Politécnica de Cartagena
 Duration: since: 01/05/2008 until: 30/04/2009
 Responsible researcher: Jose Manuel Ferrández
 Number of researchers: 5
 BUDGET: 5.000 €

Project Title: Depuración y Validación de una plataforma HWISW de apoyo a la baja visión
 Founded by: Fundación Seneca (08788/PI/08)
 Participants: Universidad Politécnica de Cartagena
 Duration: since: 01/01/2009 until: 31/12/2010
 Responsible researcher: Jose Manuel Ferrández
 Number of researchers: 4
 BUDGET: 41.600 €

Project Title: Desarrollo de un dispositivo portátil de registro multicanal wireless para aplicaciones biomédicas
 Founded by: Ministerio de Ciencia y Tecnología (FIT-150500-2002-474)
 Participants: Universidad Politécnica de Cartagena
 Duration: since: 01/01/2002 until: 31/12/2002
 Responsible researcher: Jose Manuel Ferrández
 Number of researchers: 10
 BUDGET: 18.000 €

Project Title: Diseño de un sistema retimórfico de apoyo a la baja visión mediante redes neuronales celulares en arquitecturas reconfigurables
Founded by: Fundacion Seneca, 05732/PI/07
Participants: Universidad Politécnica de Cartagena
Duration: since: 01/06/2006 until: 2007 – 2008
Responsible researcher: J. Manuel Ferrández
Number of researchers: 8
BUDGET: 45,000€

Project Title: Diseño de un sistema retimórfico de alta resolución para baja visión y neuroprótesis visuales.
Founded by: Ministerio de Trabajo y Asuntos Sociales (150/06)
Participants: Universidad Politécnica de Cartagena
Duration: since: 01/06/2006 until: 31/12/2007
Responsible researcher: Jose Manuel Ferrández
Number of researchers: 5
BUDGET: 12,000€

8. PUBLICATIONS

ARTICLES IN INTERNATIONAL JOURNALS

Authors: Carlos Colodro-Conde, F. Javier Toledo-Moreo, Rafael Toledo-Moreo, J. Javier Martínez-Alvarez, Javier Garrigos-Guerrero, J. Manuel Ferrández-Vicente
Title: : A practical evaluation of the performance of the Impulse CoDeveloper HLS tool for implementing large-kernel 2-D filters

Type of participation: Special Issue paper

Journal: Journal of Real-Time Image Processing

Published by: Springer. 1861-8200 (print version)

Authors: C. Piñana-Díaz, R. Toledo-Moreo, Fco. Javier Toledo-Moreo, A. Skarmeta

Title: A Two-Layers Based Approach of an Enhanced-Map for Urban Positioning Support

Type of participation: Regular paper

Journal: Sensors

Published by: MPDI. ISSN: 1424-8220. Oct. 2012

Authors: M. Valdés-Vela, R. Toledo-Moreo, F. Terroso-Saenz, M.A. Zamora-Izquierdo

Title: An Application of a Fuzzy Classifier Extracted from Data for Collision Avoidance Support in Road Vehicles

Type of participation: Regular paper

Journal: International Scientific Journal Engineering Applications of Artificial Intelligence

Published by: Elsevier. ISSN: 0952-1976. Feb. 2012

Authors: F. Terroso-Saenz, M. Valdés-Vela, C. Sotomayor, R. Toledo-Moreo, A. Gómez-Skarmeta.

Title: A Cooperative Approach to Traffic Congestion Detection with Complex Event Processing and VANET

Type of participation: Regular paper

Journal: IEEE Transactions on Intelligent Transportation Systems

Published by: IEEE Intelligent Transportation Systems Society. ISSN: 1524-9050.pp (in press) Jan. 2012

Authors: Ana Toledo, Rafael Toledo-Moreo, José M. Cano, Miguel Pinzolas

Title: Maneuver Prediction for Road Vehicles based on a Novel Neuro-fuzzy Dynamic Architecture

Type of Participation: Special Issue paper

Journal: Robotics and Autonomous Systems

Published by: Elsevier Editorial System. ISSN: 0921-8890. Vol 58, issue 12, pp. 1316-1320. Dec. 2010.

Authors: David Bétaille, Rafael Toledo-Moreo

Title: Creating Enhanced Maps for Lane Level Vehicle Navigation

Type of Participation: Regular paper

Journal: IEEE Transactions on Intelligent Transportation Systems

Published by: IEEE Intelligent Transportation Systems Society. ISSN: 1524-9050.pp 786-798. Vol 11, issue 4. Dec. 2010

Authors: Rafael Toledo-Moreo, Miguel A. Zamora

Title: Collision Avoidance Support in Roads with Lateral and Longitudinal Maneuver Prediction by Fusing GPS/IMU and Digital Maps

Type of Participation: Regular paper

Journal: Transportation Research Part C 18 (2010), pp. 611-625

Published by: Elsevier. ISSN: 0968-090X

Authors: Rafael Toledo-Moreo, Miguel Pinzolas-Prado, Jose Manuel Cano Izquierdo

Title: Maneuver Prediction for Road Vehicles based on a Neuro-fuzzy Architecture with a Low Cost Navigation Unit

Type of Participation: Short Paper

Journal: IEEE Transactions on Intelligent Transportation Systems

Published by: IEEE Intelligent Transportation Systems Society. ISSN: 1524-9050. Vol 11, N2, pp. 498-504 June 2010

Authors: Rafael Toledo-Moreo, David Bétaille, Francois Peyret

Title: Lane Lane-Level Integrity Provision for Navigation and Map Matching With GNSS, Dead Reckoning, and Enhanced Maps

Type of Participation: Regular Paper

Journal: IEEE Transactions on Intelligent Transportation Systems

Published by: IEEE Intelligent Transportation Systems Society. ISSN: 1524-9050. pp: 100-112. Vol 10, issue 4. March 2010.

Authors: Rafael Toledo Moreo, David Bétaille, Francois Peyret, Jean Laneurit

Title: Fusing GNSS, Dead-reckoning and Enhanced Maps for Road Vehicle Lane-Level Navigation

Type of Participation: Regular Paper

Journal: IEEE Journal of Selected Topics In Signal Processing

Published by: IEEE Signal Processing Society. ISSN: 1932-4553, Vol 3. N.5. pp 708-809. October 2009

Authors: Jose Santa Lozano, Rafael Toledo Moreo, Miguel A. Zamora-Izquierdo, Benito Úbeda-Miñarro, Antonio F. Gómez-Skarmeta.

Title: An Analysis of Communication and Navigation Issues in Collision Avoidance Support Systems

Type of Participation: Regular Paper

Journal: Elsevier Transportation Research Part C. Emerging Technologies

Published by: Elsevier. ISSN: 0968-090X, DOI: 0.1016/j.trc.2009.05.007. Vol 18, Issue 3. Pp 351-366, JUN-2009.

Authors: Ana Toledo, Rafael Toledo Moreo, Jose Manuel Cano Izquierdo.

Title: A New Metric for Supervised dFasArt Based on Size-Dependent Scatter Matrices that Enhances Maneuver Prediction in Road Vehicles

Type of Participation: Regular Paper

Journal: Lecture Notes in Computer Sciences

Published by: Springer-Verlag (LNCS 5602). , pp. 459—468 year 2009.

Authors: Rafael Toledo-Moreo, Miguel A. Zamora-Izquierdo

Title: IMM-based Lane Change Prediction In Highways With Low-Cost GPS/INS

Type of Participation: Short Paper

Journal: IEEE Transactions on Intelligent Transportation Systems

Published by: IEEE Intelligent Transportation Systems Society. ISSN: 1524-9050, , pp. 180-185. Vol 10. N.1 March 2009.

Authors: José Santa, Rafael Toledo-Moreo and Antonio F. Gómez-Skarmeta

Title: A novel vehicle communication paradigm based on cellular networks for improving the safety in roads

Type of Participation: Regular Paper

Journal: International Journal of Intelligent Information and Database Systems (IJIIDS).

Published by: INDERSCIENCE. pp. 240-257. **Date:** February 2008, United Kingdom.

LISTED IN DBLP – University Trier – Journals. ISSN: Print: 1751-5858 Online: 1751-5866. Vol 2. Num 2. 2008.

Authors: Rafael Toledo-Moreo, Miguel A. Zamora-Izquierdo, Benito Úbeda-Miñarro, Antonio F. Gómez-Skarmeta.

Title: High Integrity IMM-EKF Based Road Vehicle Navigation with Low Cost GPS/SBAS/INS.

Type of Participation: Regular Paper

Journal: IEEE Transactions on Intelligent Transportation Systems

Published by: IEEE Intelligent Transportation Systems Society. ISSN: 1524-9050, Vol 8 Num 3, Sep 2007. pp 491—511

Authors: Rafael Toledo-Moreo, Miguel Pinzolas-Prado, José Manuel Cano-Izquierdo.

Title: Supervised dFasArt: a Neuro-Fuzzy Dynamic Architecture for Maneuver Detection in Road Vehicle Collision Avoidance Support Systems.

Type of Participation: Regular Paper

Journal: Lecture Notes in Computer Sciences

Published by: Springer-Verlag (LNCS 4528). , pp. 419—428 year 2007.

Authors: Miguel A. Zamora-Izquierdo, Rafael Toledo-Moreo, Mercedes Valdés-Vela, David Gil-Galván.

Title: Neuro-Fuzzy based Maneuver Detection for Collision Avoidance in Road Vehicles

Type of Participation: Regular Paper

Journal: Lecture Notes in Computer Sciences

Published by: Springer-Verlag (LNCS 4528). , pp. 429—438 year 2007.

INTERNATIONAL MONOGRAPHS AND BOOK CHAPTERS

Authors: José Santa, Rafael Toledo-Moreo, Benito Úbeda, Miguel A. Zamora-Izquierdo, Antonio F. Skarmeta

Title Technological Issues in the Design of Cost-Efficient Electronic Toll Collection Systems

Publication: IN-TECH Vehicular Technologies

ISBN: 978-953-307-976-9

Date: accepted in June 2010

Authors: J. Toledo, J. J. Martínez, J. Garrigós, R. Toledo, J. M. Ferrández

Title Design of Embedded Augmented Reality Systems

Publication: IN-TECH Augmented Reality

ISBN: 978-953-7619-69-5

Date: February 2010

Authors: R.Toledo, C. Sotomayor., A.F.Skarmeta.

Title: Recommendations and Deployment Strategy for ITS architecture in Spain

Publication: Monograph on Advances in Transport Systems Telematics

ISBN: 83-917156-4-7

Date: October 2007

Authors: R.Toledo, C. Sotomayor., A.F.Skarmeta.

Title: QUADRANT: An Architecture Design for Intelligent Vehicle Services in Road Scenarios

Publication: Monograph on Advances in Transport Systems Telematics

ISBN: 83-917156-4-7

Date: October 2006

ARTICLES IN NATIONAL JOURNALS

Authors: Rafael Toledo-Moreo, Benito Úbeda.

Title: A Test of a GNSS/INS integrated Navigation System for Remote Services in Terrestrial Vehicles

Journal. Revista Oficial del Instituto de Navegación de España. **Issue.** 23 pages: 4-11 **ISSN:** 1578-6064

Date: First Four-month period 2005

9. CONFERENCES AND WORKSHOPS

Authors: Carlos Colodro-Conde, Rafael Toledo-Moreo, Jose Javier Diaz-Garcia, Oscar Manuel Tubio-Araujo, Isidro Villo-Perez, Javier Toledo-Moreo, Jose Javier Martinez- Alvarez, Fco. Javier Garrigos-Guerrero, Jose Manuel Ferrandez-Vicente, and Rafael Rebolo

Title: Analysis of Connection Schemes between the ICU and the DPU of the NISP Instrument of the Euclid Mission

Type of participation: Poster

Conference: IWINAC 2013

Publication: Proceedings of the conference

Place of celebration: Palma de Mallorca, Spain

Date: June 2013

Authors: Y. Mellier, E. Prieto, J. Amiaux, J.L. Augueres, J.C. Barriere, C. Bonoli, F. Bortoletto, C. Cerna, A. Cimatti, L. Corcione, L. Duvet A. Ealet, B. Garilli, P. Gondoin, F. Grupp, K. Jahnke, R. Laureijs, O. Le Fevre, S. Liori, T. Maciaszek, F. Madrid, J. Martignac, L. Martin, G. Morgante, Y. Mellier, T. Pamplona, R. Holmes, R. Grange, M. Riva, C. Rossin, G. Seidel, G. Smadja, R. Toledo-Moreo, M. Trifoglio, L. Valenziano, P.Vola, F. Zerbi

Title: Euclid Near Infrared Spectro Photometer instrument concept

Type of participation: Oral presentation

Conference: 39th COSPAR Scientific Assembly 2012

Publication: Proceedings of the conference

Place of celebration: Mysore, India

Date: July 2012

Authors: Luca Valenziano, Anna Gregorio, R. Christopher Butler, Jérôme Amiaux, Carlotta Bonoli, Favio Bortoletto, Carlo Burigana, Leonardo Corcione, Marco Frailis, Sebastiano Liori, Elisabetta Maiorano, Gianluca Morgante, Luciano Nicastro, Fabio Pasian, David Pearson, Marco Riva, Roberto Scaramella, Filomena Schiavone, Daniele Tavagnacco, Rafael Toledo-Moreo, Massimo Trifoglio, Andrea Zacchei, Filippo M. Zerbi, Thierry Maciaszek.

Title: Spaceborne survey instrument operations from Planck/LFI to Euclid NISP: lessons learned and new concepts

Type of participation: Oral presentation

Conference: SPIE Space Telescopes and Instrumentation 2012. Observatory Operations

Publication: Proceedings of the conference

Place of celebration: Amsterdam, The Netherlands

Date: July 2012

Authors: E. Prieto, J.L. Augueres, J.C. Barriere, C. Bonoli, F. Bortoletto, C. Cerna, L. Corcione, A. Ealet, B. Garilli, F. Grupp, K. Jahnke, S. Liori, T. Maciaszek, F. Madrid, J. Martignac, L. Martin, G. Morgante, Y. Mellier, T. Pamplona, R. Holmes, R. Grange, M. Riva, C. Rossin, G. Seidel, G. Smadja, R. Toledo-Moreo, M. Trifoglio, L. Valenziano, F. Zerbi

Title: Euclid Near Infrared Spectro Photometer instrument concept at the end of the phase A study

Type of participation: Oral presentation

Conference: SPIE Space Telescopes and Instrumentation 2012.

Publication: Proceedings of the conference

Place of celebration: Amsterdam, The Netherlands

Date: July 2012

Authors: M. Trifoglio, C. Bonoli, F. Bortoletto, A. Bulgarelli, R.C. Butler, C. Colodro-Conde, L. Corcione, E. Franceschi, F. Gianotti, S. Liori, T. Maciaszek, G. Morgante, J. Muñoz, L. Nicastro, R. Rebolo-López, M. Riva, E. Prieto, P.Spano, R. Toledo-Moreo, L. Valenziano, I. Villó, F.M. Zerbi

Title: Design concept of the electrical ground support equipment for the AIV and calibration of the Euclid NISP instrument

Type of participation: Poster

Conference: SPIE Space Telescopes and Instrumentation 2012

Publication: Proceedings of the conference

Place of celebration: Amsterdam, The Netherlands **Date:** July 2012

Authors L. Corcione, S. Ligorì, F. Bortoletto, C. Bonoli, R. Toledo-Moreo, P. Bastia, L. Boschini, L. Valenziano, M. Trifoglio, G. Morgante, C. Colodro, I. Villo, R. Rebolo, J.M. Sanchez

Title: The on-board electronics for the near infrared spectrograph and photometer (NISP) of the EUCLID Mission

Type of participation: Poster

Conference: SPIE Space Telescopes and Instrumentation 2012

Publication: Proceedings of the conference

Place of celebration: Amsterdam, The Netherlands **Date:** July 2012

Authors: Carolina Piñana Díaz, Rafael Toledo-Moreo, Antonio Gómez Skarmeta, David Bétaille, François Peyret

Title: Elevation-Enhanced-Map-based GPS Non-Line-Of-Sight Detection in Urban Environments

Type of participation: Oral presentation

Conference: 2012 IEEE Intelligent Vehicles Symposium Workshop on Navigation, Perception, Accurate Positioning and Mapping for Intelligent Vehicles.

Publication: Proceedings of the 2012 IEEE Intelligent Vehicles Symposium Workshops. ISBN: 978-84-695-3472-4

Place of celebration: Alcalá de Henares, Spain **Date:** June 2012

Authors: David López-Pérez, Rafael Toledo-Moreo

Title: An Approach to Road Enhanced Maps in Urban Areas

Type of participation: Oral presentation

Conference: 2012 IEEE Intelligent Vehicles Symposium Workshop on Navigation, Perception, Accurate Positioning and Mapping for Intelligent Vehicles.

Publication: Proceedings of the 2012 IEEE Intelligent Vehicles Symposium Workshops. ISBN: 978-84-695-3472-4

Place of celebration: Alcalá de Henares, Spain **Date:** June 2012

Authors: Carolina Piñana, Rafael Toledo-Moreo, David Bétaille, Antonio Gómez Skarmeta

Title: GPS Multipath Detection and Exclusion with Elevation-Enhanced Maps

Type of participation: oral presentation

Conference: 2011 14th International IEEE Conference on Intelligent Transportation Systems

Publication: 978-1-4577-2196-0/11/\$26.00 ©2011 IEEE, pp. 19-24

Place of celebration: Washington DC, USA **Date:** October 2011

Authors: Rafael Toledo-Moreo

Title: Why can't road positioning and integrity be friends?

Type of participation: Invited speaker

Conference: 2011 IEEE/RSJ International Conference on Intelligent Robots and Systems. Workshop on "Perception and Navigation for Autonomous Vehicles in Human Environment"

Publication: Proceedings of the workshop

Place of celebration: San Francisco, USA **Date:** September 2011

Authors: Rafael Toledo-Moreo, Dominique Gruyer, Alain Lambert

Title: A Theoretical Analysis of the Extended Kalman Filter for Data Fusion in Vehicular Positioning

Type of Participation: oral presentation

Conference: International Conference on Intelligent Transportation Systems Telecommunications 2011

Publication: 978-1-61284-670-5/11/\$26.00 ©2011 IEEE

Place of celebration: San Petersburgo, Russia

Date: August 2011

Authors: Cristina Sotomayor, Rafael Toledo-Moreo

Title: Event-based System for Generation of Traffic Services in Road Congestions

Type of Participation: oral presentation

Conference: IWINAC 2011

Publication: Lecture Notes in Computer Science, 2011, Volume 6686, Foundations on Natural and Artificial Computation, Pages 202-211

Place of celebration: La Palma, Spain

Date: June 2011

Authors: Rafael Toledo-Moreo, Jose Santa, M.A. Zamora, B. Úbeda, A.F. Skarmeta

Title: An Analysis of Navigation and Communication Aspects for GNSS-Based Electronic Fee Collection

Type of Participation: oral presentation

Conference: Intelligent Transportation Systems World Congress

Publication: Proceedings of the congress.

Place of celebration: Busan, South Korea

Date: October 2010

Authors: Rafael Toledo-Moreo, B. Úbeda, Jose Santa, M.A. Zamora, A.F. Skarmeta

Title: An Analysis of Positioning and Map-Matching Issues for GNSS-Based Road User Charging

Type of Participation: oral presentation

Conference: IEEE- ITS Intelligent Transport Systems Society - ITSC 2010, Intelligent Transportation Systems Conference

Publication: Proceedings of the conference.

Place of celebration: Madeira, Portugal

Date: September 2010

(LISTED IN IEEEEXPLORE)

Authors: Cristina Sotomayor-Martínez, Fernando Terroso-Sáenz, Mercedes Valdés-Vela, Rafael Toledo-Moreo

Title: Event-driven Architecture for Data Collection and Situation Awareness in Vehicular Networks

Type of Participation: poster

Conference: Workshop on Emergent Cooperative Technologies in Intelligent Transportation Systems at the IEEE- ITS Intelligent Transport Systems Society - ITSC 2010, Intelligent Transportation Systems Conference

Publication: Proceedings of the workshop

Place of celebration: Madeira, Portugal

Date: September 2010

Authors: Rafael Toledo-Moreo, Jose Santa, B. Úbeda, Carolina Piñana-Díaz, M.A. Zamora, A.F. Skarmeta

Title: Performance Aspects of Navigation Systems for GNSS-Based Road User Charging

Type of Participation: oral presentation

Conference: IEEE- ION GNSS 2010 Conference

Publication: Proceedings of the conference.

Place of celebration: Portland, USA

Date: September 2010

(LISTED IN IEEEEXPLORE)

Authors: Pedro Rodriguez, David Bétaille, Rafael Toledo-Moreo

Title: Validation of an Affordable Real Time Lane-level Positioning System for Cooperative Vehicle-infrastructure Systems

Type of Participation: oral presentation

Conference: IEEE- ION GNSS 2010 Conference

Publication: Proceedings of the conference.

Place of celebration: Portland, USA

Date: September 2010

(LISTED IN IEEEEXPLORE)

Authors: Rafael Toledo-Moreo, David Bétaille and François Peyret

Title: Integrity Provision for Map-Matched Positioning of Road Vehicles at Lane Level

Type of Participation: oral presentation

Conference: IEEE- ITS Intelligent Transport Systems Society - ITSC 2009, Intelligent Transportation Systems Conference

Publication: ISBN 978-1-4244-5520-1. pp 550-555

Place of celebration: St Louis, USA

Date: October 2009

(LISTED IN IEEEEXPLORE)

Authors: Jose Santa, Benito Úbeda, Miguel A. Zamora-Izquierdo, Rafael Toledo-Moreo, Antonio F. Gómez-Skarmeta

Title: Penetration of ITS Concepts at the University Level and Willingness to their Introduction

Type of Participation: oral presentation

Conference: IEEE- ITS Intelligent Transport Systems Society - ITSC 2009, Intelligent Transportation Systems Conference

Publication: ISBN 978-1-4244-5520-1. pp 797-802

Place of celebration: St Louis, USA

Date: October 2009

(LISTED IN IEEEEXPLORE)

Authors: R. Toledo-Moreo, J. Santa, M.A. Zamora

Title: A Cooperative Overtaking Assistance System

Type of Participation: oral presentation

Conference: IEEE- RAS 3rd Workshop on Planning, Perception and Navigation for Intelligent Vehicles.

Publication: Proceedings of the workshop. pp 50 – 56

Place of celebration: St Louis, USA

Date: October 2009

Authors: R. Toledo-Moreo, D. Betaille, F. Peyret

Title: Road Vehicle Positioning at the Lane Level Based on GNSS Integration with Enhanced Maps

Type of Participation: oral presentation

Conference: Intelligent Transportation Systems World Congress

Publication: Proceedings of the Congress, paper number: 2928

Place of celebration: Stockholm, Sweden

Date: September 2009

Authors: M. Zamora, J. Santa R. Toledo-Moreo

Title: An Experience towards The ECTS Model In Electronic Technology Using Active Learning Techniques

Type of Participation: oral presentation

Conference: EDULEARN 2009. International Conference on Education And New Learning Technologies.

Publication: Proceedings of the Conference.

Place of celebration: Barcelona, Spain

Date: July 2009

Authors: D. Betaille, R. Toledo, J. Laneurit.

Title: Making an Enhanced Map for Lane Location Based Services

Type of Participation: oral presentation

Conference: IEEE- ITS Intelligent Transport Systems Society- ITSC 2008, Intelligent Transportation Systems Conference

Publication: ISBN 978-1-4244-2112-1. pp 711—716.

Place of celebration: Beijing, China
(LISTED IN IEEEEXPLORE)

Date: October 2008

Authors: A. Dumitrache, M.A. Zamora, R. Toledo, A.F.Skarmeta.

Title: Hybridized GPS/DR Positioning System With Unknown Initial Heading For Land Vehicles

Type of Participation: oral presentation

Conference: IEEE- ITS Intelligent Transport Systems Society - ITSC 2008, Intelligent Transportation Systems Conference

Publication: ISBN 978-1-4244-2112-1. pp 974—979.

Place of celebration: Beijing, China
(LISTED IN IEEEEXPLORE)

Date: October 2008

Authors: R.Toledo, J. Santa, M.A. Zamora., B. Úbeda, A.F.Skarmeta.

Title: A Study of Integrity Indicators in Outdoor Navigation Systems for Modern Road Vehicle Applications

Type of Participation: oral presentation

Conference: IEEE/RSJ IROS International Conference on Intelligent Robots and Systems. 2nd Workshop on Planning, Perception and Navigation for Intelligent Vehicles.

Publication: ISBN: 978-1-4244-2058-2

Place of celebration: Nice, France
(LISTED IN IEEEEXPLORE)

Date: September 2008

Authors: F. Peyet, D. Bétaille, J. Laneurit, R. Toledo-Moreo

Title: Lane-level positioning for cooperative systems using EGNOS and enhanced digital maps

Type of Participation: oral presentation

Conference: ENC-GNSS (European Navigation Conference – Global Navigation Satellite Systems) Toulouse SPACE SHOW

Publication: Proceedings of the conference

Place of celebration: Toulouse, France

Date: April 2008

Authors: R.Toledo, M.A. Zamora., A.F.Skarmeta.

Title: Multiple Model based Lane Change Prediction for Road Vehicles with Low Cost GPS/IMU

Type of Participation: oral presentation

Conference: IEEE- ITS Intelligent Transport Systems Society-ITSC 2007, Intelligent Transportation Systems Conference

Publication: ISBN 1-4244-1396-6 pp. 473—468

Place of celebration: Seattle, USA.

(LISTED IN IEEEEXPLORE AND ELSEVIER SCOPUS)

Date: October 2007

Authors: R.Toledo, M.A. Zamora., A.F.Skarmeta.

Title: IMM based Maneuver Detection and Navigation for Road Vehicles with Low Cost GPS/IMU

Type of Participation: oral presentation

Conference: IEEE- ITS Intelligent Transport Systems Society- IV 2006, Intelligent Vehicles Symposium

Publication: ISBN 4-901122-86-X

Place of celebration: Istanbul, Turkey.

(LISTED IN IEEEEXPLORE AND ELSEVIER SCOPUS)

Date: June 2007

Authors: R.Toledo, M.A. Zamora., A.F.Skarmeta.

Title: An Application of Uncertain Variables to the Implementation of an Interacting Multi-Model Based Filter for The Navigation System of a Road Vehicle

Type of Participation: oral presentation

Conference: The 9th International IEEE Conference on Intelligent Transportation Systems - ITSC 2006.

Publication: ISBN: 1-4244-0094-5. pp. 1310-1315.

Place of celebration: Toronto, Canada.

Date: September 2006

(LISTED IN IEEEEXPLORE AND ELSEVIER SCOPUS)

Authors: R.Toledo, M.A. Zamora., A.F.Skarmeta.

Title: IMM-EKF based Road Vehicle Navigation with Low Cost GPS/INS

Type of Participation: oral presentation

Conference: IEEE Conference on Multisensor Fusion and Integration – MFI 2006

Publication: 1-4244-0567-X. pp. 433-438.

Place of celebration: Heidelberg, Germany.

Date: September 2006

(LISTED IN IEEEEXPLORE AND ELSEVIER SCOPUS)

Authors: J. Santa. B. Úbeda. R.Toledo, A.F.Skarmeta.

Title: Monitoring the Position Integrity in Road Transport Localization Based Services

Type of Participation: oral presentation

Conference: 64TH IEEE VTC FALL 2006. Vehicular Technology Conference

Publication: ISBN: 1-4244-0063-5.

Place of celebration: Montreal, Canada.

Date: September 2006

(LISTED IN IEEEEXPLORE AND ELSEVIER SCOPUS)

Authors: R.Toledo, M.A.Zamora, A.F.Skarmeta.

Title: A Novel Design of a High Integrity Low Cost Navigation Unit for Road Vehicle Applications

Type of Participation: oral presentation

Conference: IEEE- ITS Intelligent Transport Systems Society- IV 2006, Intelligent Vehicles Symposium

Publication: ISBN 4-901122-86-X pp. 577 – 582.

Place of celebration: Tokyo, Japan

Date: June 2006

(LISTED IN IEEEEXPLORE AND ELSEVIER SCOPUS)

Authors: R.Toledo, B.Úbeda, J.Santa, M.A.Zamora, A.F.Skarmeta.

Title: A High Integrity Low Cost Positioning System for Location Based Services.

Type of Participation: oral presentation

Conference: 5th International Conference on Transport Systems Telematics.

Publication: Transport System Telematics. ISBN 83-917156-3-9. pp. 469 – 475. ISSN 0209-3324

Place of celebration: Katowice, Poland.

Date: November 2005

Authors: A.F. Gómez Skarmeta, B. Úbeda; M.A. Zamora, R. Toledo.

Title: Actividades de peaje electrónico en España. Modelo alemán de peaje electrónico, aspectos de implantación y evaluación de su viabilidad en el ámbito de las infraestructuras españolas.

Type of Participation: workshop report

Conference: Workshop on Viability of GNSS based Road Pricing System in the frame of Spanish infrastructure.

Publication: Workshop materials.

Place of celebration: Murcia, Spain.

Date: November 2005

Authors: C.Sotomayor, R.Toledo, B.Úbeda, J.Santa.
Title: A Wide Range Utility for GPS-EGNOS Navigation System User.
Type of Participation: oral presentation
Conference: ESA Workshop on EGNOS performance and applications
Publication: ISBN 83-87280-86-0. Vol. I. pp. 195 – 200.
Place of celebration: Gdynia, Poland. **Date:** October 2005

Authors: J.Santa, B.Úbeda, R.Toledo, C.Sotomayor.
Title: A Facility For GPS/EGNOS Signal Monitoring
Type of Participation: oral presentation
Conference: ESA Workshop on EGNOS performance and applications
Publication: ISBN 83-87280-86-0. Vol. I. pp. 183 – 188.
Place of celebration: Gdynia, Poland. **Date:** October 2005

Authors: R.Toledo, B.Úbeda.
Title: A Test of a GNSS/INS integrated Navigation System for Remote Services in Terrestrial Vehicles
Type of Participation: oral presentation
Conference: 6th Geomatic Week: High resolution sensors and their applications
Publication: Proceedings of the 6th Geomatic Week: B-8737-2005
Place of celebration: Barcelona, Spain. **Date:** February 2005

Authors: B. Úbeda, R. Toledo, J. Jordán and S. Montes.
Title: A Theoretical and Practical Analysis of GNSS based on Road Pricing Systems, considering the EGNOS/SISNET Contributions.
Type of Participation: oral presentation
Conference: 2nd ESA Workshop on Satellite Navigation User Equipment Technologies. NAVITEC '2004. ESTEC.
Publication: ESA - WPP239.
Place of celebration: Noordwijk, The Netherlands. **Date:** December 2004

Authors: Rafael Toledo, Miguel A. Zamora, Benito Úbeda and Antonio F. Gómez-Skarmeta
Title: An Integrity Navigation System based on GNSS/INS for Remote Services Implementation in Terrestrial Vehicles.
Type of Participation: oral presentation
Conference: The 7th International IEEE Conference on Intelligent Transport Systems.
Publication: ISBN: 0-7803-8500-4. Vol IV. pp.477--480.
Place of celebration: Washington D.C., USA **Date:** October 2004
(LISTED IN IEEEEXPLORE AND ELSEVIER SCOPUS)

Authors: Rafael Toledo
Title: An Application on Uncertain Variables to the Intelligent Transport Systems.
Type of Participation: oral presentation
Conference: 25th International Conference on Information Systems Architecture and Technology. ISAT'2004
Publication: ISBN: 83-7085-813-9, vol I. pp. 311-317.
Place of celebration: Szklarska Poreba, Poland **Date:** September 2004

Authors: Rafael Toledo Moreo.
Title: A Study of a Simple Transportation Problem Applying Uncertain Variables.
Type of Participation: oral presentation
Conference: 15th International Conference on Systems Science.

Publication: Conference Proceedings. ISBN: 83-7085-805-8, vol II. pp. 339-345.

Place of celebration: Wroclaw, Poland

Date: September 2004

(LISTED IN ELSEVIER SCOPUS)

Authors: M. Zamora Izquierdo, R. Toledo Moreo, B. Úbeda, H. Martínez Barberá, L.M. Tomas, J. Tornero, A.F. Gómez Skarmeta.

Title: A Framework for Testing ITS Applications based on GNSS/EGNOS sensors.

Type of Participation: oral presentation

Conference: World Automobile Congress FISITA 2004

Publication: Proceedings of the World Automobile Congress FISITA 2004, Publisher: STA

Place of celebration: Barcelona, Spain

Date: May 2.004

Authors: R. Toledo, M. Zamora, B. Úbeda, H. Martínez, A.F. Gómez Skarmeta.

Title: A Precision Positioning System based on EGNOS-SISNET/INS Navigation for an Autonomous Vehicle.

Type of Participation: oral presentation

Conference: ITS in Europe 2004: Moving Towards an Integrated Europe Congress & Exhibition.

Publication: Proceedings of ITS in Europe 2004: Moving Towards an Integrated Europe Congress & Exhibition.

Place of celebration: Budapest, Hungary

Date: May 2.004

Authors: A.F. Gómez Skarmeta, H. Martínez Barberá, M. Zamora Izquierdo, B. Úbeda Miñarro, D. Alonso Cáceres, R. Toledo Moreo.

Title: Mimics Project: Evaluating EGNOS (GNSS-I) for supporting ITS applications

Type of Participation: oral presentation

Conference: 10th World Congress and Exhibition on Intelligent Transport Systems and Services (ITS'03)

Publication: Proceedings of the 10th World Congress and Exhibition on Intelligent Transport Systems and Services. Publisher: Traffic Technology International

Place of celebration: Madrid, Spain

Date: November 2.003

Authors: Humberto Martínez Barberá, Miguel Zamora Izquierdo, Rafael Toledo Moreo, Benito Úbeda Miñarro, Antonio Gómez Skarmeta

Title: The MIMICS Project: an Application for Intelligent Transport Systems

Type of Participation: oral presentation

Conference: IEEE International Intelligent Vehicles Symposium (IV-2003)

Publication: Proceedings. IEEE Volume, Issue, 9-11 June 2003 pages: 633--638 ISBN: 0-7803-7848-2.

Place of celebration: Ohio (USA)

Date: June 2.003

(LISTED IN IEEEEXPLORE AND ELSEVIER SCOPUS)

ARTICLES IN NATIONAL CONFERENCES

Authors: J. Santa, M. Zamora, Rafael Toledo-Moreo

Title: Proceso Adaptativo En La Implantacion De ABP En Materias De Sistemas Embebidos

Type of Participation: oral presentation

Conference: JENUI 2009, XV Jornadas De Enseñanza Universitaria De La Informática.

Publication: Workshop proceedings.

Place of celebration: Barcelona, Spain.

Date: July 2009

Authors: J. Santa, B. Úbeda, Rafael Toledo-Moreo, C. Sotomayor.

Title: Arquitectura Software Multiservicio Aplicada al Transporte por Carretera

Type of Participation: oral presentation

Conference: VII Congreso Español sobre Sistemas de Transporte Inteligente.

Publication: Congress proceedings.

Place of celebration: Valencia, Spain.

Date: September 2007

Authors: C. Sotomayor., R.Toledo, A.F.Skarmeta.

Title: CASHI: Sistema de Evitación de Colisiones en Autovías

Type of Participation: oral presentation

Conference: VI Congreso Español sobre Sistemas de Transporte Inteligente.

Publication: Congress proceedings.

Place of celebration: Vigo, Spain.

Date: October 2006

Authors: P. Catatá, S. Montes, B. Úbeda and R. Toledo.

Title: Problemática Asociada a los Sistemas de Peaje Electrónico Basados en GNSS

Type of Participation: oral presentation

Conference: Jornadas Técnicas de la IDE en España. JIDEE 2004.

Place of celebration: Zaragoza, Spain.

Date: November 2004

10. SCIENTIFIC COMMITTEES

Title: *Member of the IEEE RSJ Program Committee of the Workshop on Planning, Perception and Navigation for Intelligent Vehicles. 2013 IEEE IROS International Conference on Intelligent Robots and Systems. 3 November, 2013, Tokyo, Japan*

Type of activity: **International Program Committee Member**

Ambit: International

Date: November 2013

Title: *Member of Program Committee at the 16th International Conference on Intelligent Transportation Systems, The Hague, The Netherlands, 6-9 October 2013.*

Type of activity: **International Program Committee Member**

Ambit: International

Date: October 2013

Title: *Member of the Program Committee of the 2013 International Conference on Robotics and Automation. May, Karlsruhe, Germany, 2013*

Type of activity: **International Program Committee Member**

Ambit: International

Date: May 2013

Title: *Member of the Program Committee of the 13th IFAC Symposium on Control of Transportation Systems. September 12-14, Sofia, Bulgaria, 2012*

Type of activity: **International Program Committee Member**

Ambit: International

Date: September 2012

Title: *Associate Editor of the IEEE Intelligent Transportation Systems Magazine*

Type of activity: **Associate Editor of the journal**

Ambit: International

Date: Since November 2011

Title: *Member of the Program Committee of 2011 Workshop on Vehicular Communications Technology, Jeju, Korea*

Type of activity: **International Technical Committee Member**

Ambit: International

Date: December 2011

Title: *Member of the Program Committee of 14th the 2011 International Conference on Intelligent Transportation Systems, Washington DC, USA*

Type of activity: **International Program Committee Member**

Ambit: International

Date: October 2011

Title: *Member of the Program Committee of the 2011 International 2nd Workshop on GNSS Applications for Intelligent Transportation Systems, St. Petersburg, Russia*

Type of activity: **International Program Committee Member**

Ambit: International

Date: August 2011

Title: *Member of the Program Committee of the 2011 International Workshop on Intelligent Transportation Systems and Applications, Crete, Greece.*

Type of activity: **International Program Committee Member**

Ambit: International

Date: June 2011

Title: *Member of the Scientific Committee of the 2011 International Work-Conference on the Interplay between Natural and Artificial Computation, IWINAC, La Palma, Canary Islands, Spain.*

Type of activity: **International Program Committee Member**

Ambit: International

Date: May 2011

Title: *Member of the Editorial Board of the Journal of Transportation Technologies*

Type of activity: **Editorial Board Member**

Ambit: International

Date: Since January 2011

Title: *Member of the Program Committee of the 2010 IEEE International Conference on System, Man and Cybernetics October 10-13, 2010, Istanbul, Turkey*

Type of activity: **International Program Committee Member**

Ambit: International

Date: October 2010

Title: *Member of the Program Committee of the 2010 IEEE Intelligent Transportation Systems Conference September 19-22, 2010, Madeira, Portugal*

Type of activity: **International Program Committee Member**

Ambit: International

Date: September 2010

Title: *Member of the IEEE RSJ Program Committee of the 3rd Workshop on Planning, Perception and Navigation for Intelligent Vehicles. 2009 IEEE IROS International Conference on Intelligent Robots and Systems. 11 October, 2009, St Louis, USA*

Type of activity: **International Program Committee Member**

Ambit: International

Date: October 2009

Title: *Member of the IEEE ITSC Program Committee of the 2009 IEEE Intelligent Transportation Systems Conference October 4-7, 2009, St Louis, USA*

Type of activity: **International Program Committee Member**

Ambit: International

Date: October 2009

Title: *Member of the Program Committee of the 12th IFAC Symposium on Control of Transportation Systems. September 2-4, Redondo Beach, California, 2009*

Type of activity: **International Program Committee Member**

Ambit: International

Date: September 2009

Title: *Member of the IEEE IV Program Committee of the 2009 IEEE Intelligent Vehicles June, 2009, Xian, China*

Type of activity: **International Program Committee Member** Ambit: International
Date: June 2009

Title: *Member of the IEEE ITSC Program Committee of the 2008 IEEE Intelligent Transportation Systems Conference October 13-15, 2008, Beijing, China*

Type of activity: **International Program Committee Member** Ambit: International
Date: October 2008

Title: *Member of the IEEE RSJ Program Committee of the 2nd Workshop on Planning, Perception and Navigation for Intelligent Vehicles. 2008 IEEE IROS International Conference on Intelligent Robots and Systems. 22-26, 2008, Nice, France*

Type of activity: **International Program Committee Member** Ambit: International
Date: September 2008

Title: *Special issue on Information Processing for Intelligent Vehicles of the IJIDS (International Journal of Intelligent Information and Database Systems) journal. (listed in DBLP University Trier)*

Type of activity: **Guest Editor** Ambit: International
Date: January 2008

Title: *Member of the IEEE ICVES Program Committee of the 2007 IEEE International Conference on Vehicular Electronics and Safety December 13-15, 2007, Beijing, China*

Type of activity: **International Program Committee Member** Ambit: International
Date: December 2007

Title: *Member of the IFAC Technical Committee on Transportation Systems*

Type of activity: **Committee Member** Ambit: International
Date: Since July 2007

Title: *A Strategic Plan for the Intelligent Transport Systems in Spain.*

Type of activity: Documentation of future plan in Intelligent Ambit: Spanish
Transport Systems in Spain. **Expert Consultant**
Date: October 2006. Place: Madrid, Spain.

11. ORGANIZING COMMITTEES

Title: Organizer of *Special Session on Positioning and Digital Navigation Maps for Driving Assistance Systems and Autonomous Driving at the 16th International Conference on Intelligent Transportation Systems, The Hague, The Netherlands, 6-9 October 2013.*

Type of activity: **Special Session Organizer**

Ambit: International

Date: October 2013

Title: Organizer of *Workshop Environment Perception and Navigation for Intelligent Vehicles, IEEE IV Conference Brisbane, Australia, 23 June, 2013.*

Type of activity: **Workshop Organizer**

Ambit: International

Date: June 2013

Title: *Workshop organizer of the 2012 IEEE IV Workshop on Navigation, Perception, Accurate Positioning and Mapping for Intelligent Vehicles, Alcalá de Henares, Spain*

Type of activity: **Workshop organizer**

Ambit: International

Date: June 2012

Title: *Workshop and tutorial chair of the IEEE Intelligent Vehicles Symposium 2012, Alcalá de Henares, Spain*

Type of activity: **Workshop and tutorials chair**

Ambit: International

Date: June 2012

Title: Special Session on Advances in Positioning and Map-Matching and Applications at the 2010 IEEE Intelligent Transportation Systems Conference September 19-22, 2010, Madeira, Portugal

Type of activity: **Special Session Organizer**

Ambit: International

Date: September 2010

Title: *Workshop on ITS Applications and European Electronic Tolling, June 9, 2009 - Bucharest, Romania*

Type of activity: **Organizing Committee Member**

Ambit: International

Date: June 2009

Title: *Workshop on ITS Experiences in Europe, June 18, 2009 - Murcia, Spain*

Type of activity: **Organizing Committee Member**

Ambit: International

Date: June 2009

Title: *International Workshop on European ITS Architectures*

Type of activity: **Workshop Organizer**

Ambit: International

Date: November 2006.

Place: Murcia, Spain.

Title: *The German Model for Toll Collection. Implantation Aspects and its Viability in the Scope of the Spanish Infrastructures*

Type of activity: **Workshop Organizer**

Ambit: International

Date: November 2005.

Place: Murcia, Spain.

Title: *Seminar on Global Navigation Satellite Systems applied to the Intelligent Transport Systems*

Type of activity: **Seminar Organizer**

Ambit: International

Date: October 2003

Place: Murcia, Spain.

12. SCIENTIFIC STAYS ABROAD

Institution: University of Paris South 11

City: Paris

Country: France

Date: 01/11/2010

Duration: 3 months

Topic: Research of multi-sensor data fusion techniques for robust positioning.

Institution: Laboratoire Central des Ponts et Chaussées. LCPC.

City: Nantes

Country: France

Date: 01/02/2008

Duration: 1 year

Topic: Use of Cartographic Information for road vehicle positioning enhancement.

Institution: Institute of Control and Systems Engineering. Wroclaw University of Technology

City: Wroclaw

Country: Poland

Date: 15/09/2005

Duration (weeks): 20

Topic: Multi-sensor fusion applied for road vehicles positioning.

Institution: Institute of Control and Systems Engineering. Wroclaw University of Technology

City: Wroclaw

Country: Poland

Date: 15/03/2004

Duration (weeks): 18

Topic: Analysis of new techniques for sensor fusion.

Institution: Facultad de Informática, Universidad Óscar Lucero Moya.

City: Holguín

Country: Cuba

Date: 01/09/2001

Duration (weeks): 9

Topic: Teaching and Educational Planning in the field of Computer Architecture.
