

# Jorge Méndez Astudillo

**Address:** Calle de la riba 43 2-1  
08221, Terrassa. Spain

**Contact:** +34 665 035 108  
[jrgmenas@gmail.com](mailto:jrgmenas@gmail.com)

**Date of birth:** April 28<sup>th</sup> 1986

---

## Education:

---

September 2009- October 2011 **European Master of Science in Research on Information and Communication Technologies.** *Erasmus Mundus programme*<sup>1</sup>.

- September 2010-October 2011: **Karlsruhe Institut für Technologie**<sup>2</sup>, Karlsruhe Germany. *Main subjects: photonics, light engineering, systems engineering, telecommunications*
- September 2009-July 2010: **Politecnico di Torino**<sup>3</sup>, Torino Italy  
*Main subjects: signal processing, programming, electronics for telecommunications, electronic design*

August 2004-December 2008: **B.Sc. Electronics and Communications Engineering.**  
Instituto Tecnológico de Monterrey campus ciudad de México.  
*Main subjects: Electronics, signal processing, communications, control engineering, networking.*

---

## Research

---

September 2012-November 2013 **Pre-doctoral formation: Doctorate in Optics: Self-Mixing interferometry.** CD6 Barcelona Tech. Terrassa Spain. *Main duties: Bibliography research, design of a driver for a VCSEL and design of a driver for a FP laser.*

**Master Thesis:** *“Development of an Integrated Liquid Crystal Phase Shifter”* at Institute of Photonics and Quantum Electronics<sup>4</sup>, in Karlsruhe Institute of Technology. (November 2011). Supervisor-Prof. Dr. Christian Koos

**Bachelor Thesis:** *“Intelligent wheelchair with an eye-movement control”* at Tecnológico de Monterrey. (January 2008- December 2008). Supervisor. Dr. Pedro Ponce

---

<sup>1</sup> <http://www.meritmaster.org/> ; [http://ec.europa.eu/education/external-relation-programmes/doc72\\_en.htm](http://ec.europa.eu/education/external-relation-programmes/doc72_en.htm)

<sup>2</sup> <http://www.kit.edu/index.php>

<sup>3</sup> <http://www.polito.it/>

<sup>4</sup> [http://www.ihq.uni-karlsruhe.de/index\\_en.htm](http://www.ihq.uni-karlsruhe.de/index_en.htm)

## Publications/Conferences

- “Liquid Crystal Phase Shifter for the SOH Platform with Ultra-Low Power Consumption”. Alloatti, L.; Pfeifle, J.; Mendez, J.; Freude, W.; Leuthold J.; Koos, C.: *Optical Fiber Communication Conference (OFC'12)*, Los Angeles (CA), USA, March 4 - 8, 2012, paper OTu11.5
- “Self-aligned laser sensor for vibrometric measurements”. J.Mendez Astudillo, R.Atashkhoei, F.Azcona, S.Royo: *International summer school: Trends and new developments in Laser Technology*. IWS Fraunhofer Institute. Dresden, Germany (August 2012)
- *Differential Optical Feedback Interferometry: a New Method to Measure Nanometer Displacements*. F.J Azcona, R. Atashkhoei, S. Royo, J. Mendez Astudillo, A. Jha *8a reunión de Optoelectrónica, OPTOEL 2013*: Alcalá de Henares SPAIN.
- *A method to measure sub-nanometric amplitude displacements based on optical feedback interferometry*. F.J Azcona, R. Atashkhoei, S. Royo, J. Méndez Astudillo, A. Jha. *Proc.SPIE 8789*(2013).
- *A nanometric displacement measurement system using differential optical feedback interferometry* F.J Azcona, R.Atashkhoei, S. Royo, J. Méndez Astudillo, A. Jha, *Opt. Exp*(Submitted)

---

## Languages:

**Spanish:** Mother tongue

**English:** *Fluent*: 8 overall score in IELTS, September 2011.

**French:** *Fluent*: Unit B2 DELF (January 2007). Level B2 in TCF September 2008

**German:** *Advanced*: Level B2 Goethe Institut. Currently under study.

**Italian:** *Advanced*: Level B2 Scuola Leonardo da Vinci.

**Portuguese:** *Basic*. Self-taught.

**Chinese:** *Basic*. Currently under study.

---

## Awards

November 2012: **Pre-doctoral grant UPC** awarded for the academical period 2012-2013.

May 2010: **Erasmus Mundus Scholarship** awarded for the academical period 2010-2011.

May 2009: **Erasmus Mundus Scholarship** awarded for the academical period 2009-2010 in Politecnico di torino.

October 2008: Active participation in “Exposiciones Nacional 2008” (Puebla, Mexico).

October 2008: Exhibitor in NI Days 2008 in Instituto Politécnico Nacional (Mexico City, Mexico).

## **Experience:**

---

- November 2011-April 2012 : **Internship:** Intern at SolarPrint, Dublin, Ireland  
I was in charge of designing tests for their products and actively participated in designing energy harvesting systems used with their products.
- August-September 2010: **Language assistance** for Dr. Fulvio Riso, translation Italian-English of the script for the course "Advanced network design" Torino, Italia.
- January-March 2009: **Language assistance** for Dr Esau Vicente Vivas, translation Spanish-English of article: "Design of an educative satellite" UNAM, Mexico city.
- August 2008-December 2008: **Technological advisor** for BathKamer, a new company in Tec's de Monterrey business incubator.
- January 2007 – November 2007: **Teaching:** Problem solving sessions for the subject: electrical circuit analysis, the main idea was to solve problems with the students of electrical circuit analysis. Departamento de Mecatrónica. ITESM-CCM
- August-November 2007: **Maintenance of computers** in Cybertlalpan, Delegación Tlalpan.
- August-December 2006: **Server operator** in Cybertlalpan parque Morelos, Delegación Tlalpan.

## **Technological abilities:**

---

**Software:** Adobe Flash, Adobe Dreamweaver, Photoshop  
MS office: Word. Excel. Powerpoint. Visio  
PsPice. Electronics Workbench. EAGLE. Proengineer

**Programming languages:** C++. Java. Matlab. Labview.

**Other:** Cyberadmin, Rsoft, Origin, Zeemax

## **Other courses:**

---

- March 2009: **Linux services**, linux para todos. Mexico City.
- January 2009: **Installing servers using Linux**, Linux para todos. Mexico City
- July 2008: **Local wireless networks**. DGSCA-UNAM . Mexico City.
- July 2008: **CCNA1**. CISCO Networking academy. Mexico City.
- August 2004: **Introduction to telecommunications**. DGSCA-UNAM. Mexico City

## **International experiences:**

---

November 2011-April 2012: **Internship** in Dublin, Ireland.

May 2009-June 2009: **German language course** in Goethe Institute Düsseldorf.

July 2007: **Course** “*Satellite communications and mobile communications*” in College of Engineering, Copenhagen, Denmark.

June 2007: **Course** “*Wireless communications*” in School of Engineering Jönköping University, Jönköping, Sweden.

June 2006: **Language immersion course** in L’institut de tourraine, Tours France.

June 2005: **Language immersion course** in CAVILAM, Vichy, France.

June 2004: **Language immersion course** in Pluriel Langues, Nice, France.

August 2002-July 2003: **11<sup>th</sup> grade** in Vincent Massey Collegiate, Winnipeg, Manitoba, Canada.

## **Engagement:**

---

Since February 2013: **Co-founder and president** of Erasmus Terrassa, our goal is to organize activities for Erasmus students. Language exchanges, parties, trips and team-building activities.

April 2011-February 2013: **Member of Erasmus Mundus Alumni Association**. Latin American Chapter (EMA-LA<sup>5</sup>).

March 2003-July 2003: **Volunteering** in the Manitoba Children’s Museum.

## **General information:**

---

Availability to travel: Yes

Willingness to relocate: Yes

Interests: optical communications, telecommunications, photonics, light engineering, wireless sensor networks and energy harvesting.

Leisure activities: Kendo, Tennis, Rowing, Flamenco, Photography

Update: October, 2013.

References available upon request

---

<sup>5</sup> <http://ema-la.eu/>