
Curriculum Vitae



Marco Mascorro

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Contents

Resume

Personal Information

Last name: Mascorro Medina
Name: Marco Octavio
Date of birth: 22 April 1987
Nationality: Mexican



Education

- 02 - 12/2011 **Japan International Cooperation Agency (JICA) researcher, Japan.**
Robotics research and training program at Osaka International Center and Kanazawa Institute of Technology.
- 2005-2010 **Monterrey Institute of Technology and Higher Education (ITESM), Mexico.**
University with SACS accreditation for U.S. Universities.
Bachelor of Mechatronics engineering. Graduated with honors; GPA of 91.2 (Out of 100).
- 10/2008 **Hochschule Offenburg, University of Applied Sciences, Germany.**
Studies of Mechatronics engineering degree program.
Exchange year with DAAD (German Academic Exchange Service) scholarship.

Professional experience

- 01/2012 - **Monterrey Institute of Technology and Higher Education (ITESM), Mexico.**
Industrial robotics professor, focused on ABB, Yaskawa and Mitsubishi robots.
Mentor of the ITESM Robotics team LamBot 3478 for the FIRST Robotics competition 2012.
- 05 - 12/2011 **Kanazawa Institute of Technology, Japan.**
Robotics researcher focused on computer vision for intelligent robot control.
Development of a prototype of a semi-autonomous humanoid robot for nuclear exploration in radioactive and hazardous environments due to the Fukushima nuclear accident in Japan.
Development of one autonomous wheelchair with the integration of Kinect, OpenCV and ROS.
Projects presented at the International Robot Exhibition 2011 in the city of Tokyo.
- 08-11/2010 **Mexican Space Agency, Mexico.**
Development of a hexapod rescue robot and a UGV rover that can be used in natural disasters for finding people, exploration, surveillance and environment monitoring.
- 01-06/2010 **Valeo Transmissions, Mexico.**
Internship in the area of methods engineering for the development and optimization of metal stamping processes for vehicle transmissions.
- 03-07/2009 **BMW Group, Munich, Germany.**
Internship at the Research and Innovation Center (FIZ) at the department of mechatronic and driving functions. Design, development and construction of new prototypes of human-computer interaction consoles as well as mechanical and electronic interfaces of test vehicles.
- 10-12/2008 **Hochschule Offenburg, University of Applied Sciences, Germany.**
Design and development of mechanics and electronics of a lightweight vehicle with the purpose to drive as far as possible with a liter of super gasoline. (European Shell Eco-marathon Competition).

Related skills

Microcontrollers: Atmel, Motorola and Microchip, Arduino. Digital signal processing, analog and digital design, CAN, LIN, USB, Ethernet, embedded design, RF design, ZigBee, XBee, digital image processing, AdaBoost, SLAM, LIDAR technology, compactRIO, PLC's programming, automation, mechanical design, CAD, ECAD and CAE.

Languages and International profile

- 08/2008 **Mannheim, Germany**
Goethe-Institut
Advanced course of the German language (B2.2)
- 05/2007 **Munich, Germany**
DID Institut (Deutsch in Deutschland)
Intermediate course of the German language (B1)
- 12/2006 **Munich, Germany**
EF International schools (Education First)
Basic course of the German language (A2)
- 07/2005 **Vancouver, Canada**
LSC (Language Studies Canada)
English course for advanced students
- 07/2004 **Paris, France**
C.F.I.L.C. (Centre de Formation International en Langues et Communication)
Basic course of the French language (A1)

Spanish - Native language
English - Spoken and written (TOEFL 577)
German - Spoken and written (B2.2)
Japanese - Basic Knowledge
French - Basic knowledge (A1)

Computer skills

OS: Windows, Mac, Linux (Ubuntu), ROS.

- MS Office
- Solid Edge
- NX 6 Siemens PLM
- AutoCad
- Catia V5, V6
- Pro/ENGINEER 5.0
- NI MultiSIM
- Pspice
- MPLAB
- Eclipse Java
- CirCad
- OrCAD
- Eagle (CadSoft)
- Altium Designer (Protel)
- MatLab
- NI LabVIEW
- Programming:
C/C++
Java
Assembly
OpenCV(Computer Vision)

Others

- 08/2010 Patent of a hexapod rescue robot at the Mexican Institute of Intellectual Property.
- 06/2010 Award for "Exemplary Student" nominated as one of the best students of the state. ("Trayectoria de Exito" organization)
- 01/2010 Captain of the Electrathon (high efficiency electric vehicles competition) team, representative of the Monterrey Institute of Technology and Higher Education.
- 2002-2005 Award of "Distinguished Student" at the Marista High school Institute.
- 2002-2005 Member of the "Remar Leaders school" organization at the national Marista schools.

Interests and hobbies

- Hobbies: Traveling and discovering new cultures, challenging projects, drums, musical instruments, digital sound recording, photography, model aircraft (hobby airplanes), friends and movies.
- Sports: Tennis, cycling, juggling and ping pong.