

CURRICULUM VITAE

PERSONAL DATA

NAME: MARIO ALEJANDRO ROJAS QUIÑONES
DATE OF BIRTH: 25 of September, 1980.
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PROFILE

Dedicated, hardworking and responsible professional, highly committed to the assigned tasks and greatly interested in learning all kinds of new things. Good capabilities for group work, enthusiasm, initiative and good personal relations.

STUDIES

POSTGRADUATE: October 2006 – June 2008
European Master in Vision and Robotics VIBOT.
Heriot Watt University (Edinburgh), Universitat de Girona (Spain) and Université de Bourgogne (France). Awarded unconditional grant for the duration of the masters.

UNDERGRADUATE: August 1999 – December 2005
Pontificia Universidad Javeriana, Bogotá,
Colombia
Electronic Engineer
GPA 4.01/5
Awarded best undergraduate project for the first period of 2006

August 1998 – June 1999
Universidad Distrital Francisco José De Caldas,
Two Semesters of Electronic Engineering.

HIGH SCHOOL:

Liceos del Ejército,
Colegio De Bachillerato PATRIA
Bogotá D.C. (6 years)

Last term senior year Killeen High School
Killeen Texas, United States
January 1998 – June 1998

OTHERS:

Pontificia Universidad Javeriana
XI Symposium on Signal Processing, Images and
Computer Vision
Final Project presentation
September 13 to 15 2006

URIGO

Advanced training in iFIX GEFANUC Intellution
supervisory systems
March 6 to 10 2006

E.C.I Equipos y Controles Industriales

Basics on Factory Link 7.5
February 27 to March 3 2006

Pontificia Universidad Javeriana,

Programa de Educación Continuada
Basics on Solaris
September 1st to 9th 2004

Universidad de los Andes,

IEEE Rama Estudiantil
Communications day
April the 22nd 2004

Pontificia Universidad Javeriana – Universidad

Distrital FJC,
IEEE Rama Estudiantil
Intelligent Control Tutorial
March the 28th 2003

Goethe Institute, Bogotá, Colombia

German course, February 2001 – June 2002

K.O.E. de Colombia

English course, March 1993 – March 1996

LANGUAGES

Spanish	Native Speaker
English	Proficiency in all skills <i>TOEFL 277/300, February 15th 2006</i>
German	Elementary level

ACADEMIC PROJECTS

Masters Final Project: Acoustic Representation of Images for the Visually Impaired. The aim of the project was to propose and implement a system that generated virtual spatialized audio cues for navigational purposes, which location was extracted from a life video capture. MatLab

Masters course projects: Triangulation-based Laser Scanning. The project objective was to write a state of the art of this technology.

Dense Matching Adapted to Catadioptric Images. The aim of this project was to devise a solution for the problem of generation of dense clouds of points that enabled the reconstruction of objects directly from an image captured by an omni directional system without the need of rectification.

Medical Imaging Modalities. Comparative survey of MRI, CT, Echocardiography and Nuclear Cardiology.

Endocardial and Epicardial Contour Detection. Propose and implement a semiautomatic method for the detection of the left ventricle endocardial and epicardial contours on a series of images.

Simulation of the PASCAL CHALLENGE. The aim of the project was to simulate the first task of the Pascal challenge, to recognize different kinds of objects in real images.

Behaviour Based Control Architecture for an AUV. The goal was to design, implement and test the mentioned control scheme in order to provide a

virtual AUV its autonomy to avoid obstacles while accomplishing a specific mission.

Object Tracking. Develop an object tracking algorithm in real time using Handel-C using a FPGA from Celoxica.

Digital Watermarking of Images. Survey and implementation of different techniques.

Masters Courses Concepts and Implementations (MatLab): PCA and LDA Bayesian Pattern Classification Methods; Mallat's Algorithm for the wavelets dyadic analysis; Wiener filter; Video compression methods –survey; Camera Calibration; Law's masks and Co-occurrence Matrices; Structure from Motion; SIFT; ASM; Region Growing algorithms; SLAM; Kalman filter; Match Filtering.

Undergraduate Final Project: Detection and Recognition of defects in Sanitary-ware by Means of Machine Vision. Propose, implement and evaluate a system that could detect several different types of defects (17) in sanitary ware (toilet tanks) pieces for an industrial manufacturer in order to automate the quality control process.

SOFTWARE MANAGED

Microsoft Windows (XP, 2000, 98), Microsoft Office (Word, Excel, Power Point), MS Project, Latex.

Strong knowledge of MatLab and intermediate level of C/C++, Orcad, Visual Basic, Modbus, FactoryLink, iFIX, RSLinx, OPC, RsLogix, InTouch, Allen Bradley.

Basic knowledge of Ubuntu and the OpenCV libraries.

Experience in assembly and set up of personal computers with Microsoft Windows OS

WORK EXPERIENCE

PLC CONTROL LTDA. March 27th 2006 to July 31st 2006.

Charge: Service Engineer

Functions: Client support for supervisory systems, PLC troubleshooting solution, applications development.

INVENSYS SYSTEMS L.A. COLOMBIA, V.A.S. August 2004 to August 2005

Charge: Practitioner.

Functions: Assistance in projects execution: HMI configuration, control and security sequences creation. Assistance in maintenance and solution of specific troubleshoot.

PONTIFICIA UNIVERSIDAD JAVERIANA, Engineering Faculty, Electronics Department, July 2002 to November 2002

Charge: module assistant; Subject Systems and Circuits I.

Functions: Assist with the grading of papers and quizzes, help students solving doubts and exercises.

IHN Ltda. Ingeniería Hidráulica y Neumática Ltda. May 2002 to July 2002, November 2002 to December 2002

Charge: Assistant of industrial Mechanics.

Functions: Maintenance of hydraulic units, assistance with the making of it as well, assistance in the construction of hydraulic cylinders. Those assigned by the chief of the workshop.

PERSONAL PROFILE

I enjoy music of many kinds and like learning about it is even better if I can go to dance furthermore, I enjoy playing guitar and if it is with friends in a relaxed lounge and a good wine or a beer, which I also appreciate, I'm all joy.

Reading also is such a good friend, always there to teach us, cheers us up and let us know so much about so many things, is always a good way to enlighten ones soul.

But all this comes in a vessel and I try to keep it in shape, I enjoy running, biking, swimming and in general physical activities.

REFEREES

Pr Fabrice Meriaudeau
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