Carlos Gálvez

PERSONAL INFORMATION

DATE OF BIRTH

December 29th 1991

NATIONALITY

Spanish

ADDRESS Mobile Phone Nordostpassagen 23 Lgh 1203, 413 11 Gothenburg, Sweden

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E-MAIL

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EDUCATION

AUG 2013 - JUN 2015

Systems, Control and Robotics, MSc

KTH ROYAL INSTITUTE OF TECHNOLOGY, Stockholm, Sweden.

Master's Thesis on Sensor Fusion for Autonomous Driving [Galvez2015Thesis].

Advisor: Prof. John Folkesson, Examiner: Prof. Patric Jensfelt.

GPA: A.

Aug 2013 - Jun 2015

Civilingenjörsutbilding, MSc Electrical Engineering

KTH ROYAL INSTITUTE OF TECHNOLOGY, Stockholm, Sweden.

Jul 2014 - Aug 2014

Tohoku University Engineering Summer Programme (TESP)

TOHOKU UNIVERSITY, Sendai, Japan.

Lectures and seminars related to robotics. Project: lidar-based obstacle avoidance.

SEP 2009 - JUN 2015

Telecommunication Engineering, (5-year programme, MSc accredited by ABET)

E.T.S.I. TELECOMUNICACIÓN, UNIVERSIDAD POLITÉCNICA DE MADRID, Spain.

GPA: 9.20/10.0

EXPERIENCE

AUG 2015 - PRESENT

Software Developer - Sensor Fusion at VOLVO CAR CORPORATION, Sweden

Development of algorithms for sensor data fusion, including lidar, radar and camera, in the context of Volvo Cars' autonomous driving project *Drive Me*. Experience in high-perfomance computing, safety-critical code as well as the ISO 26262 standard.

Agile development and continuous integration workflow.

Jun 2014 - Jul 2014

Research Engineer at COMPUTER VISION AND ACTIVE PERCEPTION LAB, KTH, Sweden Development of an autonomous robot to perform 3D mapping with Kinect-like ca-

meras in hardly accesible environments. Based on ROS, OpenCV and PCL.

OCT 2012 - OCT 2013

Fellowship at Signals and Systems Department, ETSIT-UPM, Spain

Development of a vision-based parking occupancy estimation system, using OpenCV and Qt libraries. Involved in the national project *Ciudad 2020*, related to smart cities.

Scientific paper published at IET-ITS [Galvez2015].

OCT 2011 - OCT 2012

Fellowship at Electrical Engineering Department, ETSIT-UPM, Spain

Development and integration of a new educational hardware platform for the study

of ARM microcontrollers at the Electronic Systems Laboratory.

OCT 2009 - OCT 2010

Fellowship at Telematic Engineering Department, ETSIT-UPM, Spain

Design of an optical handwritten character recognition system (OCR), with the aim

of automatizing various teaching and administrative tasks.

PROJECTS

SEP 2015 - PRESENT	Autonomous quadcopter. Based on Arduino Mega 2560 and Raspberry Pi 2.
Mar 2015 - Jun 2015	Face detector . Image-based, combining Adaboost and Deep Learning. Project for the course <i>Image Recognition and Classification</i> .
OCT 2014 - DEC 2014	Maze exploration robot . Control, 3D object recognition, mapping, localization and planning. Project for the course <i>Robotics and Autonomous Systems</i> .
SEP 2012 - JAN 2013	Augmented Reality mobile application . Real-time visual tracking and control of robots. Special Project for the course <i>Digital Electronics Systems Laboratory</i> .
Jan 2012 - Jun 2012	Line-following robot . Participation in Robotech-UPM and Campus Party robotic competitions.
SEP 2011 - JAN 2012	Adversarial learning through genetic algorithms . Predator-prey robot learning simulation. Project for the course <i>Introduction to Intelligent Robotics</i> .

HONOURS AND AWARDS

2015	Winner of the robot contest for the course <i>Robotics and Autonomous Systems</i> .
2009 - 2013	Extraordinary Academic Performance Scholarship (Madrid Government).
2009	Highest Honours in High School. Best academic record (GPA: 10.0/10.0).

LANGUAGES

SPANISH: Mothertongue
ENGLISH: Fluent TOEFL iBT: 110/120, September 2012 (Spain)
SWEDISH: Advanced CEFR: B2, June 2015 (Sweden)

COMPUTER SKILLS

PROFICIENT | C/C++, MATLAB & SIMULINK, OpenCV, PCL, ROS

INTERMEDIATE | Java, Python, CMake, OpenGL, OpenCL, CUDA, Qt, Bash, Git, Gerrit, Lance Linux

Basic | HTML, CSS, JavaScript, J2EE, SQL, Android, ASM, VHDL

GitHub repository: https://github.com/carlosgalvezp

INTERESTS

Travelling, photography, hiking, cycling, reading, movies, music. Learning through online courses (MOOC): Coursera, Udacity, edX, etc.

PUBLICATIONS