Carlos Gálvez

PERSONAL INFORMATION

Date of Birth $\, \big| \,$ December $29^{th} \, 1991$ Spanish

NATIONALITY

GPA: 9.20/10.0.

Address

Prinsgatan 11, Lgh 1401, 413 05 Gothenburg, Sweden

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EDUCATION

OCT 2016 - PRESENT	Self-Driving Car Engineer Nanodegree
	Udacity.
	Deep Learning, Computer Vision, Sensor Fusion, Localization and Mapping, Control.
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.
	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)
	Тоноки 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.

EXPERIENCE

APR 2017 - PRESENT	Software Engineer - Perception at ZENUITY, Sweden TO DO.
Aug 2015 - Apr 2017	Software Engineer - 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 <i>Drive Me</i> . 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 RGBD cameras in hardly accesible environments. Based on ROS, OpenCV and PCL.
ОСТ 2012 - ОСТ 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 <i>Ciudad 2020</i> , related to smart cities. Scientific paper published at IET-ITS.
ОСТ 2011 - ОСТ 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	

JAN 2017 - FEB 2017	Vision-based lane marking and vehicle detection for autonomous driving. Application of Computer Vision and Machine Learning techniques.
DEC 2016 - JAN 2017	Behavioral cloning for autonomous driving. Application of Convolutional Neural Networks to predict steering angle from images.
Nov 2016 - Dec 2016	Traffic sign recognition using Deep Learning. Achieved 95.8% accuracy on test set.
Mar 2015 - Jun 2015	Face detector. Image-based, combining Adaboost and Deep Learning.
OCT 2014 - DEC 2014	Maze exploration robot. Control, 3D object recognition, mapping, localization and planning.
SEP 2012 - JAN 2013	Augmented Reality mobile application. Real-time visual tracking and control of robots.
SEP 2011 - JAN 2012	Adversarial learning through genetic algorithms. Predator-prey robot learning simulation.

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).

COMPUTER SKILLS

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

INTERMEDIATE | Java, CMake, OpenGL, OpenCL, CUDA, Qt, Bash, Git, Gerrit, MEX, Linux.

BASIC | HTML, CSS, JavaScript, J2EE, SQL, Android, ASM, VHDL.

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