J. Javier Gálvez-Gamboa

My adress, My adress
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My Phone
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Master in computer technology with a background in mechatronics engineering and knowledge of machine and deep learning. Excited to merge these fields to develop new technologies that benefit society.

SKILLS

Software	LaTex*, AutoCAD 2D*, Siemens NX, Amazon Web Services (AWS), microcontrollers programming with CodeWarriors and CCS compiler.
Programming	C/C++, Python, Matlab* & Simulink*, Tensorflow, Keras.
Language knowledge	English (Professional working proficiency), Spanish (Native proficiency).

*denotes advanced skill level

EDUCATION

Nov 2016 – Present

Self-Driving Car Engineer Nanodegree Program – Udacity

2014 – 2016

Master in Computer Technology with Honorable Mention – Instituto Politécnico Nacional
Thesis: "Mitotic Cells Recognition of Breast Cancer Using Deep Learning Techniques".

Apr 2016

Machine Learning Course – Certificate by Stanford University in Coursera.

2008 – 2013

Bachelor of Mechatronics Engineering – Instituto Tecnológico de Culiacán.

PROJECTS

2017 — Behavioral Cloning
- Built and trained a convolutional neural network for end-to-end driving in a simulator, using TensorFlow and Keras.

2016 — Tumor Proliferation Assessment Challenge 2016 (TUPAC 2016).
- Developed a mitosis detection method used deep learning techniques trained with unsupervised algorithms.
- 13th place among 14 participants and 159 registered users.

2014 — Assessment of an Average Controller for a DC/DC Converter via Either a PWM or a Sigma-Delta-Modulator.
- Programmed a controller in Matlab-Simulink. Designed experiments and collected data with dSPACE electronic card.
- Published the results in a JCR journal. DOI:10.1155/2014/196010

2012 — Freescale Cup Mexico: Intelligent Car Racing.
- Led a team of two people and designed the control of a line follower robot using a linear camera.
- 6th place among the 94 teams inscribed for the national intelligent car racing.

2011 — Virtual modeling of a track-vehicle at Research Center of Automotive Mechatronics.
- Designed in Siemens NX software a virtual city with different road conditions.
- Collaborated in the validation of the mathematical model of a differential traction control system for an electric vehicle with embedded motor wheels.

EXPERIENCE

Jul 2013 – Jul 2014

Instrument engineer – iControl.
- Assisted in calibration sensors and repaired the PLCs used in fishmeal industries.
- Built Human Machine Interface with RSView software to visualize different variables of a fish-meal plant such as temperature, the velocity of motors and level sensors.

Apr 2010 – Apr 2010

Panel builder – Industrias Rochín S.A. de C.V.
- Assembled the control panels used to automate the packaging of fruit and vegetables.
- Organized to work in a team of four people.

Sep 2008 – Aug 2009

Electrical drafter – ACI (Automatización y Control Industrial)
- Drew electric schemes of control panels with AutoCAD software.
- Generated the panel documentation delivered to the customers.