## **CURRICULUM VITAE**

# JOSÉ M. HORAS AZNAR

## **MSc Physics**

Spanish National and Munich resident jose.horas@gmail.com

https://github.com/josehoras

## **CORE COMPETENCIES**

- Passionate about Artificial Intelligence and Neural Networks
- Excellent adaptability to new environments and diverse cultural settings
- Strong mathematical background and analytical thinker as Physics graduate
- Translating the physical reality into mathematical models as Modelling Engineer
- Working with production and different stakeholders as Equipment Engineer

#### **EDUCATION**

From 2019

## Student on AI and Neural Networks

- Graduated to Udacity Nanodegree: Self-Driving Car Engineer (360 hrs.)
- Graduated to Udacity Nanodegree: Intro into Self-Driving Cars (160 hrs.)
- Audit Stanford's CS231n: CNNs for Visual Recognition (100 hrs.)
- Audit Stanford's CS224n: NLP with Deep Learning (100 hrs.)

2007

MSc Physics at the Ludwig-Maximilian University in Munich and University of Seville (ES)

## PROFESSIONAL EXPERIENCE

**2017 - 2018 Sabbatical** 

**South East Asia** 

- Gap year discovering different cultures, volunteering, and expanding personal limits and skills
- 2008 2016 Senior Semiconductor Engineer

Intel (Munich, DE)

2013 - 2016

RF Modelling Engineer

- Designed and modelled semiconductor devices for new silicon technologies
- Substantially reduced development lead time through automation, using SKILL programming language and deploying scripts to the wider team

2011 - 2013

Lead Probing Engineer

- Owned test equipment roadmap, qualification projects, and vendor management
- Successfully introduced RF test technology, improving equipment performance at the production line in excess of 15%

2008 - 2011

**Probing Engineer** 

Infineon (Munich, DE)

Qualified new test equipment and technology for the production line, maintained and improved engineering laboratory developing Labview scripts

2007

Visiting scientist

Ludwig Maximilians University (Munich, DE)

• Research on quantum Hall systems

2006

Research student

Characterize and process GaAs/AlGaAs semiconductor wafers

### **COMPUTER AND LANGUAGE SKILLS**

Deep Learning Frameworks: TensorFlow, Keras, PyTorch
Programming Languages: Python, C++, SKILL, Labview

Development Libraries:
ROS, OpenCV, numpy, matlibplot, pandas
Development Tools:
Jupyter Notebooks, Docker, Git, GitHub

• Languages: Spanish (Native), English (Excellent), German (Excellent)

## SCIENTIFIC PUBLICATIONS

- "Asymmetric nonlinear response of the quantized Hall effect" New Journal of Physics 12, 113011 (2010)
- "Interaction mediated asymmetries of the quantized Hall effect" Eur. Phys. Lett. 88, 17007 (2009)
- "Investigations on unconventional aspects in the quantum Hall regime of narrow gate defined channels" Physica E 40, 1130-1132 (2008)