

## CURRICULUM VITAE

**JOSÉ M. HORAS AZNAR**

**MSc Physics**

Spanish National and Munich resident

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<https://github.com/josehoras>

<https://josehoras.github.io/>

### CORE COMPETENCIES

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- 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

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- 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 Ludwig-Maximilian University in Munich and University of Seville (ES)

### PROFESSIONAL EXPERIENCE

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- 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%
  - Presented at multiple Industry events with attendance ranging from 10s to 100s
- 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

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- Deep Learning Frameworks: TensorFlow, Keras, PyTorch
- Programming Languages: Python, C++, SKILL, Labview, SQL, R
- Development Libraries: ROS, OpenCV, numpy, matplotlib, pandas
- Development Tools: Jupyter Notebooks, Docker, Git, GitHub
- Languages: Spanish (Native), English (Excellent), German (Excellent)

### SCIENTIFIC PUBLICATIONS

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- "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)