

Max Serra Lasierra Data Scientist | B.Sc. in Physics | R&D Engineer

I am a Physics graduate turned Data Scientist with 5+ years of working experience in industrial R&D and Data Science. I am passionate about RL, causal AI and the opportunities that GenAI is unlocking. I have worked on the end-to-end development of an IoT product, led a small team at 22 and hosted a series of workshops for the FactoryPal Data Science team. With an analytical mindset, I always strive to understand the bigger picture to solve problems pragmatically. I am a proactive person with a social conscience who loves to leverage data to make a positive difference.

WORKING EXPERIENCE

Research Assistant - SFB 1294, University of Potsdam

February 2023 - August 2023

• Analysed and worked on the extension of existing regime dependent causal discovery algorithms for the non-linear case.

Working Student Data Scientist - FactoryPal GmbH

December 2021 - May 2023

- Worked on the continuous development of the data pipelines to improve performance and scalability.
- Supported multiple research tasks on how to improve the model and its performance, specially under model drifting conditions.
- Organised workshops on "Causal Discovery on time series" for the Data Science team.

Research and Development Engineer - FFT GmbH

June 2019 - June 2021

- Conceptualized and developed an IoT product: sensor and gateway for safer sailplane winch launches. Over 200 launches during 2020.
- Designed a PCB, which as of my departure was in the process of getting a CE certification.
- Coordinated the work of three master students during their internships and masters theses.
- Designed and led the SW architecture of a calibration machine for load cells and force transducers.
- Contributed to the concept and development of a data management and evaluation tool based on the Odoo framework.

Research and Development Internship - FFT GmbH

June 2018 - June 2019

- Developed a wireless sensor network for structural monitoring of transportation modules.
- Designed a PCB prototype with sensors, display and wireless capability.
- Wrote and tested C drivers and libraries for the PCB sensors and display.

Research Assistant - Optical Trapping Lab, University of Barcelona August 2016 - February 2017

• Collaborated in the generation of diffraction patterns with acousto-optic modulators to create optical tweezers used for cell manipulation.

DETAILS

04.10.1996

Potsdam / Berlin Germany

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SKILLS

Data Science Reinforcement Learning Causal Inference Python Git SQL Java, C Docker, AWS, Heroku Embedded Systems Product Design Team Coordination

LANGUAGES

Catalan - Native Spanish - Native English - Proficient (C2) German - Intermediate

INTERESTS

Blockchain / DeFi Climbing / Bouldering Surfing / Cycling Woodwork / Gardening

SOCIAL WORK

Volunteer and Data Ambassador

- Data Science for Social Good (DSSG) Berlin
- 2021 present

Volunteer

- El Xiprer / Caritas
- 2012 2018

Private tutor

- Self employed
- 2010 2016

EDUCATION

Master in Data Science and Innovation - UTS, Sydney

August 2023 - January 2024 (exchange semester)

- Courses: Advanced Machine Learning Applications, Leading Data Science Initiatives and Rapid Value Creation.
- Within Rapid Value Creation I used generative AI to enter markets such as Etsy, Amazon and YouTube. I also crafted a chatbot business based on LLMs.

M.Sc. in Data Science - University of Potsdam

October 2021 - August 2024 (expected)

• Focus courses: Reinforcement Learning, Causal Inference, Statistical Data Analysis, Data Assimilation and Bayesian Inference.

MicroMaster in Statistics and Data Science - MIT on edX

August 2019 - November 2020

• Courses: Probability, Statistics, Data Analysis in Social Science and Machine Learning with Python. <u>See course record.</u>

B.Sc. in Physics - University of Barcelona

September 2014 - January 2019

• Fundamental Physics and thesis on "Interaction of SAW with the nuclear spin".

REFERENCES

Dr. Jana de Wiljes

Lecturer in Potsdam, collaborated with her through the SFB 1294. <u>TU Ilmenau</u> <u>University of Potsdam</u>

Edith Chorev Metger (PhD)

Director of Data Science while I worked at FactoryPal. LinkedIn