



Sebastian Dittert

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🌐 www.linkedin.com/in/sebastian-dittert/

🔗 <https://github.com/BY571>

[Website](#)

Born: 03. June 1992

WORK EXPERIENCE

November 2020 - ongoing

Research Assistant

Computational Science Laboratory
Universitat Pompeu Fabra (UPF), Barcelona

September 2020 - ongoing

Machine Learning Engineer

Quantfolio.AI

October 2019 – March 2020

Graduate, Master Thesis at ZF

ZF Friedrichshafen AG, Friedrichshafen

- Master Thesis: Optimization of the Control of Damper System / Chassis System through fast learning Deep Reinforcement Learning Algorithms

April 2019 – September 2019

Internship Machine Learning

ABB, Cottbus

- Working on development of autonomous reclaiming method for pithead stocks, based on reinforcement learning
- Working on optimization algorithms of mining processes

October 2016 – January 2017

Internship

Euro-k, Cottbus

- Working on Pressure loss calculations for the secondary air system of a turbo group housing
- Comparison and evaluation of 3D scan surface models as part of the company's internal quality assurance system

EDUCATION

2017 – March 2020

Master of Science (Mechanical Engineering)

From Brandenburgische Technische Universität Cottbus-Senftenberg

- Specialization: Automotive Engineering

2012 – 2017

Bachelor of Science (Mechanical Engineering)

From Brandenburgische Technische Universität Cottbus-Senftenberg

- Specialization: Automotive Engineering

Certifications

April 2020 – May 2020

Udacity Nanodegree: Artificial Intelligence

December 2019 – January 2020

Udacity and Intel AI Edge Scholarship

May 2019 – July 2019

Udacity Nanodegree: Deep Reinforcement Learning

November 2017 – November 2018

Udacity Nanodegree: Self-Driving Car Engineer

Technical skills

- | | |
|-------------------------|-----------------------------------------------------------------------------------------|
| Programming Languages | <ul style="list-style-type: none">• Python• C++• Matlab |
| Deep Learning Libraries | <ul style="list-style-type: none">• PyTorch• Keras |
| Other | <ul style="list-style-type: none">• ROS• OS: Linux Ubuntu |

Projects

December 2017 – June 2018

Construction of a Robo-Car / Autonomous RC-Car (Hardware and Software)

- Predict acceleration and steering angle through camera inputs and a CNN
- Driving autonomously along a track
- [Video](#)

June 2019 – ongoing

Implementing Deep Reinforcement Learning Algorithms from scratch with PyTorch

[Github](#)

- Reinforcement Learning Upside-Down
- TD3 and SAC
- PG, PPO
- DDQN, Dueling DQN and Add-ons for Rainbow
- Genetic Algorithms and Evolution Strategies based on Neuro-Evolution
- Multi-Agent RL

Personal skills

Strengths

- High self-motivation.
- High curiosity and interest in learning new things.
- Ability to work under pressure.
- Ability to work individually as well as in a team.
- Excellent logical, analytical and computational skills.
- Positive attitude

Languages Known

- German : Native speaker
- English : Fluent
- Spanish : Beginner

Hobbies

- Sports
- Reading
- Cooking
- Technical tinkering
- learning and exploring new things