

# Lars Carius

Curriculum Vitae

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#### Education

Since 4/2019 Master of Science in Robotics, Cognition, Intelligence, Technical University of Munich, Munich.

4/2019 Bachelor of Science in Mechanical Engineering, Technical University of Munich, Munich.

Graduation Grade: 1.4 (Top 1%)

3/2015 Certificate of General Qualification for University Entrance (Abitur), Otto-Schott-Gymnasium Mainz, Germany.

Graduation Grade: 1.0 (100%)

1/2012 - 6/2012 Exchange Semester, Maroochydore State High School, Australia.

### Practical Experience

Internships and Work Experience

10/2019 - 2/2020 Innovation Project with E.ON FutureLab, Munich.

 $\circ\,$  Extensive market study & product development based on Design Thinking methods

Since 9/2019 Scholar at Manage&More by UnternehmerTUM, Munich.

- Interdisciplinary entrepreneurial projects
- $\circ\,$  Seminars in the areas of leadership qualification and personal development

4/2019 - 9/2019 Working Student Simulation Development Autonomous Driving, BMW Group, Munich.

- Software development in C++ (openPASS)
- o CI-development (Buildserver, Cloud Computing, Git Management)

10/2018 - 4/2019 Internship Modelling and Decision Sciences Engineer, McLaren Applied Technologies, London.

- Developent of a Vehicle Dynamics Simulator including traffic simulation (multi-machine real-time implementation, accepted for the IEEE ICASSP conference 2019)
- Development of multiple vision-based closed-loop Advanced Driver Assistance Systems for real-time driver simulations
- o Computer Vision, Object Detection, Deep Learning, Continuous Control

- 9/2017 9/2018 Research Assistant, Gear Research Centre, Chair of Machine Elements, TU Munich, Munich.
  - Supervision of 6 working students
  - Development of automatic evaluation and feedback tools (MATLAB, Python, Moodle)
  - Development of standalone Windows and Linux applications
- 11/2017 2/2018 Junior Teaching Assistant, Chair of Thermodynamics, TU Munich, Munich.
  - Distinction by the faculty: best exercise course

#### Projects and Courses

- 10/2019 2/2020 Semester Project: RGB-D Video Generation using GANs, Dynamic Vision and Learning Group (Prof. Dr. Matthias Nießner), TU Munich, Munich.
  - 11/2019 Winner of YB Hackathon, YB Bern & isolutions, Bern.
    - $\circ$  Cloud-based Augmented Reality and roid app for ordering and delivering food & drinks in a stadium
    - Mapping & navigation using visual feature recognition & tracking
- 2/2019 4/2019 **Formula Pi**, London.
  - o Participation in a Raspberry Pi based autonomous racing league
  - Team leader and technical development
- 4/2018 10/2018 Bachelor's Thesis "Artificial Intelligence for Cooperative Games", Chair of Automotive Technology, TU Munich, Munich.

  Grade: 1.0 (100%)

## Scholarships and Memberships

- Since 11/2019 Think Digital scholarship by the Internet Business Cluster e.V. (IBC)
- Since 11/2019 Member of START Munich e.V.
- Since 4/2016 Scholarship by the Friedrich Naumann Foundation for Freedom

## IT/Computer Science Skills

- Basics C, Codesys, Autodesk Inventor, CATIA V5
- Proficient C++, Java, ARCore, R, TensorFlow, PyTorch, Keras, SUMO, GIT, Microsoft Office, Inkscape, Adobe Acrobat X Pro, Jira, Confluence
- Advanced Python, Kotlin, OpenCV, LaTex, Android Studio, MATLAB, Simulink, rFpro

### Language Skills

German First language

English Fluent

Italian Basics

# Engagements

- Since 10/2019 **Team lead Start-up Tour & Start-up World Tour**, Manage&More by UnternehmerTUM, Munich, Germany.
  - Leading a team of five to organize a 6 day trip for 20 people to a Warsaw including the organisation of company visits and workshops
  - Organisation of monthly online events with international speakers
  - 6/2018 Organization of a 3 day Industry 4.0 seminar for students, Friedrich Naumann Foundation for Freedom, Munich, Germany.
    - $\circ\,$  Planning, acquisition of speakers, presentation etc.