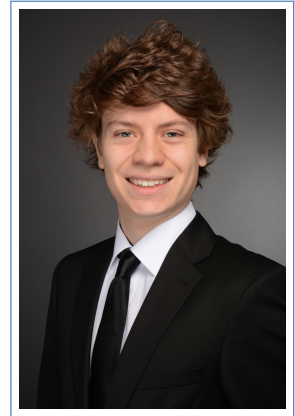


# Lars Carius

## Curriculum Vitae

Ohlmüllerstraße 32  
81541 Munich  
☎ +49 176 82502615  
✉ carius.lars@gmail.com



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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.

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### Practical Experience

#### Internships and Work Experience

- 10/2019 – 2/2020 **Innovation Project with E.ON FutureLab**, *Munich*.
  - Extensive market study & product development based on Design Thinking methods
- Since 9/2019 **Scholar at Manage&More by UnternehmerTUM**, *Munich*.
  - Interdisciplinary entrepreneurial projects
  - 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)
  - CI-development (Buildserver, Cloud Computing, Git Management)
- 10/2018 – 4/2019 **Internship Modelling and Decision Sciences Engineer**, *McLaren Applied Technologies*, London.
  - Development 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
  - 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.
- Cloud-based Augmented Reality android app for ordering and delivering food & drinks in a stadium
  - Mapping & navigation using visual feature recognition & tracking
- 2/2019 – 4/2019 **Formula Pi**, London.
- 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

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

## Language Skills

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|---------|----------------|
| German  | First language |
| English | Fluent         |
| Italian | Basics         |

## Engagements

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