

## EDUCATION

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- Oct. 2021 - Present    **Master of Science – Computational Physics**, University of Heidelberg  
Master thesis: in the field of representation learning in cooperation with LMU Munich supervised by Prof. Dr. Björn Ommer (ongoing).  
Current grade: 1.4 (\* grade scale explanations see below)
- Oct. 2017 - Sep. 2021    **Bachelor of Science – Physics**, University of Heidelberg  
Semester abroad: Portland State University (Sep. 2019 - Apr. 2020, US)  
Bachelor thesis: *“Conditional Similarity Learning for Multilabel Classification of Medical Images”* supervised by Prof. Dr. Björn Ommer.  
Final grade: 1.8
- Sep. 2009 - Jul. 2017    Wilhelmi-Gymnasium Sinsheim (High school)  
Final grade: 1.3

## WORKING EXPERIENCE

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- Sep. 2021 - Present    **Research assistant, Group of Prof. Dr. Ommer, Heidelberg University / LMU Munich**
- Work on own project in the field of representation learning
  - Create new approaches based on recent research using Python, TensorFlow and Jax
  - Increased classification performance of lung diseases by 11% based on ROC AUC score over baseline by using different metric learning techniques in combination
  - Planned publication of results in a research paper at the beginning of 2023
- Jan. 2019 - Present    **Teaching assistant, Physics Department, Heidelberg University**
- Prepare and perform lab experiments as a supervisor
  - Correct lab reports and provide help as needed
  - Supervise groups of up to eight people of various backgrounds: physicists, chemists, medics
- Sep. 2019 - Mar. 2020    **Intramurals Sports Official, Portland State University**
- Officiated soccer and basketball games as a referee and taught young referees the law of the game
  - Organized game days together with colleagues
  - Worked as a team on and off the field

## EXTRACURRICULARS

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- Oct. 2021    Participated at **Q-Summit Hackathon by IBM** on the topic of bias free AI winning 2<sup>nd</sup> place (see projects on [mafi2.github.io](https://mafi2.github.io))
- Since 2017    Member of the German Physics Society (DPG)
- Since 2014    Soccer Referee
- Since 2013    Member of the Big Band of Sinsheim (trumpet)

## SKILLS

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- Programming Languages: Python, R, C++  
Frameworks/Libraries: TensorFlow, Jax, Flax, PyTorch, NumPy  
Miscellaneous: Git, Latex  
Languages: German (mother tongue), English (fluent - spent 8 months in the US), French (intermediate), Chinese (fundamentals)