

PERSONAL

Name Moritz Krügener
 Date of Birth 1994
 Address Berlin, Germany
 Nationality German



EXPERIENCE

2019 – 2020 **Master Thesis Student:** Rocket Engine Surrogate Modelling
Toulouse using Deep Convolutional Neural Networks
 Advanced Space Concept Laboratory (SaCLab)
ISAE-Supaero / TUM



2018 – 2020 **Junior Developer/Research Assistant:** *ls1-mardyn/AutoPas CI*
Munich Parallelization of C++ code / Custom CI Pipeline + Web Frontend
 Chair of Scientific Computing in Computer Science (SCCS)
Technische Universität München



2018 – 2019 **Student teaching assistant:** *Advanced Programming*
Munich Chair of Scientific Computing in Computer Science (SCCS)
Technische Universität München



2017 **Machine Learning and Data Science Researcher (3 mos.)**
Barcelona *Bioinformatics and Biomedical Signals Laboratory*
Universitat Politècnica de Catalunya



2016 – 2017 **Student teaching assistant**
Berlin Laboratory Courses, Physics Department
Freie Universität Berlin



PROJECTS








2018 – 2019 **Team Lead BGCE Honours Project**
Munich Collaboration with Siemens to improve Industrial Design Pipeline
 via Machine Learning and CFD Simulation
Technische Universität München / Siemens

























2017 **Alexa Skill Development for Natural Workflows**
Barcelona Multi-Client, Alexa-enabled, dynamic web app for data analysis.
Universitat Politècnica de Catalunya



EDUCATION

2018 – 2020 <i>Munich</i>	Bavarian Graduate School of Computational Engineering <i>Technische Universität München</i>	Elitenetzwerk Bayern 
2017 – 2020 <i>Munich</i>	M.Sc. (Hons.) Computational Science and Engineering Current Grade 1.5 <i>Technische Universität München</i>	
2013 – 2017 <i>Berlin</i>	B.Sc. Physics with courses in Maths and Economy Grade 1.2 - Top 10% of graduates <i>Freie Universität Berlin</i>	
2016 <i>Berlin</i>	Bachelor thesis (Physics: Grade 1.0) „Communication Analysis of Dynamics in Alkaline Phosphatase“ Computational Biophysics Group, AG Imhof <i>Freie Universität Berlin</i>	
2015 – 2016 <i>Manchester</i>	Erasmus+ exchange student MPhys (Hons) Focus on Computational Astrophysics <i>The University of Manchester</i>	
2016 – 2017 <i>Berlin</i>	Architecture Studies <i>Technische Universität Berlin</i>	
2005 – 2013 <i>Münster</i>	Secondary education: Abitur (1.0) <i>Annette-von-Droste-Hülshoff-Gymnasium, Münster</i>	

SKILLS

Languages	German (native) English (C2, CAE, fluent) French (B1, limited proficiency)								
Programming	<table border="0"> <tr> <td></td> <td>Python</td> </tr> <tr> <td></td> <td>C++</td> </tr> <tr> <td></td> <td>CUDA Java MPI/OpenMP</td> </tr> </table>		Python		C++		CUDA Java MPI/OpenMP		
	Python								
	C++								
	CUDA Java MPI/OpenMP								
Software	 Git \LaTeX								
+ Frameworks	<table border="0"> <tr> <td></td> <td>pyTorch MongoDB Django</td> </tr> <tr> <td></td> <td>Docker Jenkins GitHub API</td> </tr> <tr> <td></td> <td>Fluent HTML/CSS/JS/WebSockets StarCCM+</td> </tr> <tr> <td></td> <td>TensorFlow Dymola Rhino3D</td> </tr> </table>		pyTorch MongoDB Django		Docker Jenkins GitHub API		Fluent HTML/CSS/JS/WebSockets StarCCM+		TensorFlow Dymola Rhino3D
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