

CURRICULUM VITAE

EXPERIENCE

05/2020–07/2021	Wind resource assessor at wind farm developer UKA, Meissen, Germany (<i>Wind potential assessment for wind farm sites</i>)
10/2018–03/2020	Research assistant at Leibniz Institute for Tropospheric Research, Leipzig, Germany (<i>Implementation of a particle based cloud microphysics simulation module</i>)
10/2017–07/2018	Student teaching assistant at University of Freiburg, Institute of Physics, Germany (tutoring in <i>classical mechanics, thermodynamics and electrodynamics</i>)
07/2016–09/2017	Full-time intern (three months) and subsequent student research assistant at Fraunhofer Institute for Solar Energy Systems, Freiburg, Germany (<i>Artificial Neural Networks for Use in Solar Thermal Energy</i>)
05/2015–01/2016	Student assistant at University Duisburg-Essen, Faculty of Physics, Germany (<i>Simulation of thermoelectrical transport in semiconductors</i>)

EDUCATION

(THESES AND CODES AVAILABLE ON <https://github.com/JanKBohrer>)

09/2021–06/2022	Study program Research Master in Fluid Dynamics at the von Karman Institute for Fluid Dynamics, Belgium (Master project: <i>Development of a miniature Doppler lidar for wind velocity measurements</i>)
10/2016–11/2019	Study program M.Sc. Physics at University Freiburg, Germany Degree M.Sc. Physics (With honors; Grade 1.1 (excellent)) Master thesis at Leibniz Institute for Tropospheric Research, Leipzig in cooperation with University Freiburg, Institute of Physics (Prof. Schilling): “ <i>Modeling and simulation of atmospheric cloud droplets</i> ”
10/2011–09/2015	Study program B.Sc. Energy Science at University Duisburg-Essen, Germany (four-year Bachelor-plus program, incl. one year abroad) Degree B.Sc. Energy Science (With distinction; Grade 1.0 (very good)) Bachelor thesis at University Duisburg-Essen, Faculty of Physics (Prof. Wolf): “ <i>Molecular dynamics simulation of heat transfer at silicon grain boundaries</i> ”
08/2013–07/2014	ERASMUS study program (one year) at NTNU Trondheim, Norway
10/2010–09/2011	Study program Mechanical Engineering at Karlsruhe Institute for Technology, Germany
06/2009	Abitur (Grade 1.4) at Altes Gymnasium, Bremen, Germany

PUBLICATIONS, POSTERS AND PAPERS

(AVAILABLE ON <https://github.com/JanKBohrer>)

- Journal publication J.K. Bohrer, K. Schröer, L. Brendel and D.E. Wolf. *Thermal resistance of twist boundaries in silicon nanowires by nonequilibrium molecular dynamics*. AIP Advances 7, 045105 (2017), (<https://doi.org/10.1063/1.4979982>)
- Conference poster J.K. Bohrer and O. Knoth. *Euler-Lagrangian cloud model with dynamic particle forces*. Workshop on Eulerian vs. Lagrangian methods for cloud microphysics, Cracow, Poland, April 15-17, 2019 (http://ww2.ii.uj.edu.pl/~arabas/workshop_2019/)
- Conference poster J.K. Bohrer and O. Knoth. *Discrete particle methods for a scalable atmospheric dynamics solver*. Fourth Leibniz Mathematical Modeling and Simulation Network days, Kühlungsborn, Germany, March 20-22, 2019 (<https://www.wias-berlin.de/workshops/MMSDays19/>)
- Conference poster W. Kramer, J.K. Bohrer and M. Bitterling. *Künstliche Neuronale Netzwerke für die Anwendung in der Solarthermie*. Poster in Ostbayerisches Technologie-Transfer-Institut e.V. -OTTI-, Regensburg, 27. Symposium Thermische Solarenergie, Bad Staffelstein, 2017, pp. 36-37 (ANNSolar: <https://www.ise.fraunhofer.de/en/research-projects/annsolar.html>)
- Term paper J.K. Bohrer. *Generation of Markov state models for the description of protein dynamics from molecular dynamics simulation data*. Term paper in Stochastic Dynamics (2018). University Freiburg, Germany, Institute for Physics. (https://github.com/JanKBohrer/Publications-Posters-and-Papers/blob/master/Bohrer_2018_Term_Paper_Markov_State_Models.pdf)

ACADEMIC SERVICES

- 09/2021–06/2022 Research Master student representative at the von Karman Institute for Fluid Dynamics, Belgium
- 10/2011–09/2013 Student member of the Energy Science program examination board at University Duisburg-Essen, Germany

VOLUNTEERING AND CIVILIAN SERVICE

- 09/2017–07/2018 Voluntary work in the sustainability working group of non-profit association “Weitblick”, Freiburg, Germany
- 02/2016–05/2016 Voluntary work at energy self sufficient ecological project “Sunseed Desert Technology” in Spain and several ecological projects in Portugal
- 07/2009–03/2010 Civilian service at Workers’ Welfare Association (AWO), Bremen, Germany

LANGUAGES

German	native
English	fluent

SOFTWARE AND PROGRAMMING SKILLS

Python	Advanced
C++	Beginner
UNIX & LaTeX	Intermediate
OpenFOAM (CFD)	Beginner
Cadence Omnis (CFD)	Beginner
EMD windPRO	Intermediate
Windographer	Intermediate