

Curriculum vitae

Philipp Schlüter

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Born: August 17, 1990



Professional Experience

- since July 2020 **Research fellow**
INM-2, Molecular Organization of the Brain, Research Center Jülich.
Researcher
Multimodal Neuroimaging Group, Department of Nuclear Medicine, University Hospital Cologne.
IT Officer. Research Data Manager. Technical coordinator for data exchange with collaboration partners.
- 2019 – 2020 **Research fellow**
Institut for Geophysics and Meteorology, University Cologne.
Analysis of MRI and PET images of Alzheimer and control patients with Matlab and SPM. Analysis of functional and structural networks. Data Mining with Unsupervised Learning and Principal Component Analysis. Parameterization and numerical modeling of an advection-diffusion model for Alzheimer relevant proteins with Python and Cython. Visualizations with Visbrain.
- 2016 – 2019 **Research assistant**
Institut for Geophysics and Meteorology, University Cologne.
Analysis of the climate dependence of different vegetation types by means of Supervised Machine Learning with Python, Numpy and scikit-learn. Modeling of vegetation and generation of a digital elevation model and coastline model for the last ice age. Visualizations using Matlab.
- 2013 – 2016 **Student research assistant**
Institut for Geophysics and Meteorology, University Cologne.
Analysis of experimental data from the Japan-Australia Dust Experiment using Matlab. Numerical modeling of dust emission processes with Fortran. Analysis of satellite data (MODIS) and visualizations with ArcGIS.

Formal Education

- 2013 – 2015 Heinrich Heine University Düsseldorf
Bachelor of Science Computer Science. Grade: 1.7
- 2012 – 2016 University Cologne
Master of Science Physics, ended without a degree
- 2009 – 2012 Ruprecht-Karls-University Heidelberg
Bachelor of Science Physics. Grade: 2.2
- 2000 – 2009 Bischöfliches Gymnasium St. Michael, Ahlen, Abitur, Grade: 1.5

Further Education

- 2020 John Hopkins University “Data Science Specialization” on Coursera: R Programming in RStudio, Exploratory Data Analysis, Statistical Inference, Regression Models, Shiny Apps.

Stanford Online “Machine Learning” on Coursera: SVMs, Neural Networks, Clustering, Dimensionality Reduction, Recommender Systems, Deep Learning, Bias/Variance Theory.

“Deep Learning Specialization” der deeplearning.ai on Coursera: Neural Networks, Hyperparameter Tuning, Regularization and Optimization, Convolutional Neural Networks, Sequence Models, Computer Vision, Natural Language Processing, Speech Recognition, TensorFlow, Keras.
- 2019 Stanford Online “Mining Massive Datasets”: Big-Data Algorithms, Locality-Sensitive Hashing, PageRank, Social-Network Graph Analysis, Large-Scale Machine Learning, Hadoop und MapReduce.

Stanford Online: “Relational Algebra” und “SQL”.

University Helsinki MOOC “Object-Oriented Programming with Java”.

Publications

- 2018 Shao, Anhäuser, Ludwig, Schlüter, Williams
Statistical reconstruction of global vegetation for the last glacial maximum
Global and Planetary Change, Volume 168