# Biographical Sketch: Andreas C. Müller

### Professional Preparation

University of Bonn	Germany	Mathematics	Vordiplom 2005
University of Bonn	Germany	Mathematics	Diplom 2009
University of Bonn	Germany	Computer Science	PhD 2014

### **Appointments**

since $2018$	Associate Research Scientist, Columbia University
2016 – 2018	Lecturer in Data Science, Columbia University
2014 – 2016	Research Engineer, NYU Center for Data Science
2013-2014	Machine Learning Scientist, Amazon Germany

# Five related products

- Andreas C Müller and Sarah Guido. Introduction to machine learning with Python. O'Reilly Media, 2016
- Olivier Grisel, Andreas Müller, Fabian Pedregosa, Lars Buitinck, Alexandre Gramfort, Gilles Louppe, Peter Prettenhofer, Mathieu Blondel, Vlad Niculae, Arnaud Joly, Joel Nothman, Jake Vanderplas, Manoj Kumar, Robert Layton, Nelle Varoquaux, Noel Dawe, Johannes Schönberger, Denis A. Engemann, Wei Li, Raghav R V, Clay Woolam, Kemal Eren, Eustache, Alexander Fabisch, Alexandre Passos, and Virgile Fritsch. scikit-learn 0.17.1. Nov. 2015. DOI: 10.5281/zenodo.49910. URL: http://dx.doi.org/10.5281/zenodo.49910
- Lars Buitinck, Gilles Louppe, Mathieu Blondel, Fabian Pedregosa, Andreas Müller, Olivier Grisel, Vlad Niculae, Peter Prettenhofer, Alexandre Gramfort, Jaques Grobler, Robert Layton, Jake Vanderplas, Arnaud Joly, Brian Holt, and Gaël Varoquaux. "API design for machine learning software: experiences from the scikit-learn project". In: European Conference on Machine Learning and Principles and Practices of Knowledge Discovery in Databases. Prague, Czech Republic, Sept. 2013. URL: https://hal.inria.fr/hal-00856511
- Andreas Müller, Forest Gregg, Vlad Niculae, Lars, Thorsten B., Shuyang Sheng, Dmitry Kondrashkin, Joel Nothman, Eduardo Zamudio, and Bart Janssen. *pystruct: 0.2.5.1.* Apr. 2016. DOI: 10.5281/zenodo.49909. URL: http://dx.doi.org/10.5281/zenodo.49909
- G. Varoquaux, L. Buitinck, G. Louppe, O. Grisel, F. Pedregosa, and A. Müller. "Scikitlearn: Machine Learning Without Learning the Machinery". In: *GetMobile: Mobile Comp. and Comm.* 19.1 (June 2015), pp. 29–33. ISSN: 2375-0529. DOI: 10.1145/2786984.2786995. URL: http://doi.acm.org/10.1145/2786984.2786995

### Five other significant products

- Alexandre Abraham, Fabian Pedregosa, Michael Eickenberg, Philippe Gervais, Andreas Mueller, Jean Kossaifi, Alexandre Gramfort, Bertrand Thirion, and Gaël Varoquaux. "Machine learning for neuroimaging with scikit-learn". In: Frontiers in Neuroinformatics 8 (2014)
- Andreas Müller and Sven Behnke. "PyStruct: learning structured prediction in python". In: The Journal of Machine Learning Research 15.1 (2014), pp. 2055–2060
- Andreas Müller, Sebastian Nowozin, and Christoph Lampert. "Information Theoretic Clustering Using Minimum Spanning Trees". In: Pattern Recognition (2012), pp. 205–215
- Dominik Scherer, Andreas Müller, and Sven Behnke. "Evaluation of pooling operations in convolutional architectures for object recognition". In: Artificial Neural Networks-ICANN 2010. Springer, 2010, pp. 92–101
- Andreas Müller and Sven Behnke. "Learning depth-sensitive conditional random fields for semantic segmentation of rgb-d images". In: Robotics and Automation (ICRA), 2014 IEEE International Conference on. IEEE. 2014, pp. 6232–6237

# Synergistic Activities

- Software Carpentry instructor, contributor to software carpentry and data carpentry teaching material.
- Regular tutorials on machine learning and scikit-learn, materials published under CC-0 license.
- Contributions to the OpenML open source project.
- Contributions to the nbconvert open source project for publishing using Jupyter Notebooks.
- Organizer of regular "coding sprints" to broaden the contributor base of open source projects, with an annual event focussed on female developers.