

# Klaus Greff

## Curriculum Vitæ

✉ [klaus.greff@startmail.com](mailto:klaus.greff@startmail.com)

📄 [qwlouse.github.io](https://github.com/qwlouse)

🌐 [qwlouse](https://qwlouse.com)



### Personal Information

Date of Birth 31 May 1985  
Place of Birth Kaiserslautern, Germany

### Education

1995–2004 **Abitur**, *Hohenstaufen-Gymnasium Kaiserslautern*, Grade: very good Ø 1.5.  
2004–2010 **Computer Science Diploma**, *TU Kaiserslautern*, Grade: very good Ø 1.1.  
Major Algorithmisches Lernen  
Minor Mathematics, Algorithm Engineering, Parallel Computers, Algorithmic Geometry  
2004–2009 **Student Assistant**, *Fraunhofer ITWM*, Kaiserslautern.  
Various projects in the field of High Performance Computing  
2011–2012 **PhD Student**, *International DFG Graduate School IRTG 1131*.  
Topic Gesture Recognition using Depth Cameras  
2012–today **PhD Student**, *Swiss AI Lab IDSIA*.  
Topic Very Deep Learning and Iterative Inference  
Supervisor Prof. Dr. Jürgen Schmidhuber

### Languages

German **Mother tongue**  
English **Fluent** *spoken and written*  
French **Basic** *4 years of school lessons*

### Skills

Programming Proficient in Python, C++, Java, Javascript – Basic Knowledge in Octave/Matlab, SQL, Pascal  
Machine Learning Brainstorm, Theano, Keras, Tensorflow, Scikit-Learn  
Applications Git, SVN, CMake, L<sup>A</sup>T<sub>E</sub>X, Inkscape, Lyx, Gimp, PyCharm, ...

### Interests

- Perceptual Grouping
- Artificial General Intelligence
- Self-improvement
- Unsupervised Learning
- Inspiration from Neuroscience
- Origami

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## Publications

- 1 Klaus Greff, Antti Rasmus, Mathias Berglund, Tele Hotloo Hao, Jürgen Schmidhuber, and Harri Valpola. Tagger: Deep unsupervised perceptual grouping. *CoRR*, abs/1606.06724, 2016.
- 2 Simon Harding, Jan Koutník, Klaus Greff, Jürgen Schmidhuber, and Andy Adamatzky. Discovering boolean gates in slime mould. *CoRR*, abs/1607.02168, 2016.
- 3 Jelena Luketina, Mathias Berglund, Klaus Greff, and Tapani Raiko. Scalable gradient-based tuning of continuous regularization hyperparameters. In *Proceedings of the 33rd International Conference on Machine Learning, ICML 2016, New York City, NY, USA, June 19-24, 2016*, pages 2952–2960, 2016.
- 4 Klaus Greff, Rupesh Kumar Srivastava, Jan Koutník, Bas R. Steunebrink, and Jürgen Schmidhuber. LSTM: A search space odyssey. *CoRR*, abs/1503.04069, 2015.
- 5 Klaus Greff, Rupesh Kumar Srivastava, and Jürgen Schmidhuber. Binding via reconstruction clustering. *CoRR*, abs/1511.06418, 2015.
- 6 Rupesh Kumar Srivastava, Klaus Greff, and Jürgen Schmidhuber. Highway networks. *CoRR*, abs/1505.00387, 2015.
- 7 Rupesh Kumar Srivastava, Klaus Greff, and Jürgen Schmidhuber. Training very deep networks. In *Advances in Neural Information Processing Systems 28: Annual Conference on Neural Information Processing Systems 2015, December 7-12, 2015, Montreal, Quebec, Canada*, pages 2377–2385, 2015.
- 8 Jan Koutník, Klaus Greff, Faustino J. Gomez, and Jürgen Schmidhuber. A clockwork RNN. In *Proceedings of the 31th International Conference on Machine Learning, ICML 2014, Beijing, China, 21-26 June 2014*, pages 1863–1871, 2014.
- 9 Daniel Engel, Klaus Greff, Christoph Garth, Keith Bein, Anthony S. Wexler, Bernd Hamann, and Hans Hagen. Visual steering and verification of mass spectrometry data factorization in air quality research. *IEEE Trans. Vis. Comput. Graph.*, 18(12):2275–2284, 2012.
- 10 Klaus Greff, André Brandão, Stephan Krauß, Didier Stricker, and Esteban Clua. A comparison between background subtraction algorithms using a consumer depth camera. In *VISAPP 2012 - Proceedings of the International Conference on Computer Vision Theory and Applications, Volume 1, Rome, Italy, 24-26 February, 2012.*, pages 431–436, 2012.