Martin Trapp

Curriculum Vitae

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Professional Experience

2015 – 2017 **Research Associate**, *Austrian Research Institute for Artificial Intelligence*, Austria.
Member of the Applied Cognitive Science and Social Robotics Group
Associated Projects: FWF P-27530, FWF P-25380
Research Topics: Bayesian Nonparametrics, Machine Learning, Natural Language Processing

2009 – 2015 **Research Associate**, *VRVis Research Center*, Austria.
Member of the Biomedical Image Informatics Group
Research Topics: Image Processing, Machine Learning

Education

2015 **PhD Computer Science**, *Graz University of Technology*, Austria.

2009 – 2014 **Dipl. Ing. Computational Intelligence**, *Vienna University of Technology*, Austria.

2006 – 2009 **BSc Computer Science**, *University of Applied Science Technikum Vienna*, Austria.

Research Interests

- Machine Learning
- Bayesian Nonparametrics
- Tractable Probabilistic Models
- Multivariate Statistics
- Image Processing
- Natural Language Processing

Technical Skills

Programming Julia, R, Java, Python, C++

Tools Stan, Tensorflow, Git

Participation In Events

2017 **11th Conference on Bayesian nonparametrics**, Paris, France.
(forthcomming)

2016 **30th Annual Conference on Neural Information Processing Systems (NIPS)**, Barcelona, Spain.

2015 **29th Annual Conference on Neural Information Processing Systems (NIPS)**, Montreal, Canada.

2015 **iV&L Net Summer School on Vision and Language**, Leuven, Belgium.

2014 **Visual Computing for Biology and Medicine**, Vienna, Austria.

2013 **Neurobiology of Drosophila Meeting at Cold Spring Harbor Laboratory**, New York, USA.

2013 **Visual Computing in Medicine Sub Committee Meeting**, Heidelberg, Germany.

2012 **Eurographics**, Cagliari, Italy.

2009 **RoboCup Workshop**, Wels, Austria.

Invited Talks

2016 **Invited Panelist**, *Practical Bayesian nonparametrics workshop of the 30th Annual Conference on Neural Information Processing Systems (NIPS)*, Barcelona, Spain.

2013 **3D Object Retrieval in an Atlas of Neuronal Structures**, *Visual Computing in Medicine Sub Committee Meeting*, Heidelberg, Germany.

Publications

[2] M. Trapp, R. Peharz, T. Madl, F. Pernkopf, and R. Trappl, "Infinite sum-product networks," in *Conference on Bayesian nonparametrics*, 2017.

[4] M. Skowron, M. Trapp, S. Payr, and R. Trappl, "Automatic identification of character types from film dialogs," *Applied Artificial Intelligence*, vol. 30, no. 10, pp. 942–973, 2016.

[5] M. Trapp, R. Peharz, M. Skowron, T. Madl, F. Pernkopf, and R. Trappl, "Structure inference in sum-product networks using infinite sum-product trees," in *Practical Bayesian Nonparametrics Workshop*, 2016.

[6] M. Trapp, F. Schulze, A. A. Novikov, L. Tirian, B. J. Dickson, and K. Bühler, "Adaptive and background-aware gal4 expression enhancement of co-registered confocal microscopy images," *Neuroinformatics*, vol. 14, no. 2, pp. 221–233, 2016.

[7] M. Trapp, "Bnp.jl: Bayesian nonparametrics in julia.," in *Bayesian Nonparametrics: The Next Generation Workshop*, 2015.

[8] M. Trapp, E. Langer, F. Schulze, K. Bühler, and B. J. Dickson, "Brainimage - retrieval of globally and locally similar confocal images of the drosophila central nervous system," in *Neurobiology of Drosophila*, 2013.

[9] M. Trapp, F. Schulze, K. Bühler, T. Liu, and B. J. Dickson, "3d object retrieval in an atlas of neuronal structures," *The Visual Computer*, vol. 29, no. 12, pp. 1363–1373, 2013.

[10] M. Trapp, F. Schulze, K. Bühler, T. Liu, and B. J. Dickson, "Brainneuron - retrieval of globally and locally similar segmented neuronal representations in drosophila," in *Neurobiology of Drosophila*, 2013.

[11] F. Schulze, M. Trapp, K. Bühler, T. Liu, and B. J. Dickson, "Similarity based object retrieval of composite neuronal structures.," in *Proceedings of the 3D Object Retrieval Workshop at Eurographics*, 2012, pp. 1–8.

References

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