

# Paulo Eduardo Rauber

Switzerland, 2017  
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## Main interests

Machine learning, reinforcement learning, recurrent neural networks.

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## Background

- 2017–(2019) **Postdoctoral researcher**, *Dalle Molle Institute for AI Research (IDSIA, Switzerland)*.  
Supervisor: Dr. Jürgen Schmidhuber.
- 2012–2017 **PhD in Computer Science**, *Joint degree at University of Campinas (Brazil) and University of Groningen (Netherlands)*.  
Supervisors: Dr. A.X. Falcão, Dr. A.C. Telea, Dr. P.J. de Rezende, and Dr. J.B.T.M. Roerdink.  
*Admitted in first place to MSc at Unicamp and consequently invited to PhD.*
- 2008–2011 **BSc in Computer Science**, *Federal University of Santa Catarina (Brazil)*.  
*More than three standard deviations above the mean on national graduate school admission exam.*

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## Selected papers

- 2017 P. E. Rauber, F. Mutz, and J. Schmidhuber, "*Hindsight policy gradients*", arXiv preprint (NIPS 2017 Hierarchical Reinforcement Learning Workshop).
- 2017 P. E. Rauber, S. G. Fadel, A. X. Falcão, and A. C. Telea, "*Visualizing the Hidden Activity of Artificial Neural Networks*", IEEE Transactions on Visualization and Computer Graphics (Proceedings of Visual Analytics Science and Technology 2016).
- 2017 J.F. Kruiger, P. E. Rauber, R. M. Martins, A. Kerren, S. Kobourov, and A. C. Telea, "*Graph Layouts by t-SNE*", Computer Graphics Forum (Proceedings of EuroVis 2017).
- 2016 P. E. Rauber, A. X. Falcão, and A. C. Telea, "*Visualizing Time-Dependent Data Using Dynamic t-SNE*", Proceedings of EuroVis Short Papers 2016. **Honorable mention.**
- 2013 P. E. Rauber, A. X. Falcão, T. V. Spina, and P. J. de Rezende, "*Interactive Segmentation by Image Foresting Transform on Superpixel Graphs*", Proceedings of SIBGRAPI 2013.

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## Teaching

- 2017 *Deep learning lab*: introduction to deep learning using TensorFlow.

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## Supervision

- 2016 J.F. Kruiger, "*Graph Layouts by t-Distributed Stochastic Neighbor Embedding*", MSc thesis, University of Groningen, 2016. Supervisors: Dr. A.C. Telea and P.E. Rauber.
- 2015 S. Feringa, "*Comparison of Features Used in Automatic Skin Lesion Classification*", MSc thesis, University of Groningen, 2015. Supervisors: Dr. A.C. Telea and Dr. M.H.F. Wilkinson. Advisor: P.E. Rauber.

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## Skills

- Languages Portuguese and English.
- Programming Python (NumPy, TensorFlow) and C++ on GNU/Linux.

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## Personal

- Born 1989, Brazil.