# Paulo Eduardo Rauber

#### Main interests

Machine learning, reinforcement learning, and recurrent neural networks.

## Background

- 2017–(2019) **Researcher**, *Dalle Molle Institute for Artificial Intelligence Research (Switzerland)*. Supervision: Dr. J. Schmidhuber.
  - 2012–2017 **PhD in Computer Science**, *Joint degree at University of Campinas (Brazil) and University of Groningen (Netherlands)*.

    Supervision: Dr. A.X. Falcão, Dr. A.C. Telea, Dr. P.J. de Rezende, and Dr. J.B.T.M. Roerdink.

GPA 4.0. 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.

## Selected publications

- 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", in Proceedings EuroVis Short Papers 2016. **Honorable mention.**
- P. E. Rauber, A. X. Falcão, T. V. Spina, and P. J. de Rezende, "Interactive Segmentation by Image Foresting Transform on Superpixel Graphs", in Workshops of SIBGRAPI 2013, E. J. Y. C. C. Alex Cuadros-Vargas, Ed., Arequipa, Peru.

## Supervision

- 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 F. Heikamp, "Comparison of Feature Selection Techniques in Real and Synthetic Data", BSc thesis, University of Groningen, 2015. 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.

#### Skills

Languages Portuguese and English.

Programming Python (NumPy, Theano) and C++ on GNU/Linux.

#### Personal

Born 1989, Brazil.