Michiel Straat

Curriculum Vitae

Nijenborgh 9, office 594
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The Netherlands
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Date of Birth: 30.12.1994 - Nationality: Dutch

Current position

10/2018-Present	**PhD candidate**, *Statistical Physics of Learning*, Intelligent Systems, Bernoulli Institute for Mathematics, Computer Science and Artificial Intelligence. University of Groningen, The Netherlands

Work experience

06/2017-12/2017	**Philips**, *Internship*, Drachten, The Netherlands.
07/2008-06/2014	**Software consultant**, *Self-employed*, Leeuwarden, The Netherlands.

Education

09/2016-09/2018	**Master's Degree in Computing Science (Specialization: Intelligent Systems and Visualization)**, *University of Groningen*, Faculty of Science and Technology, Cum Laude. Thesis: On-line Learning in Neural Networks with ReLU Activations Supervisors: Prof. Dr. Michael Biehl and Dr. Kerstin Bunte
09/2013-08/2016	**Bachelor's Degree (Dutch Dipl.- Inform.) in Computing Science**, *University of Groningen*, Faculty of Science and Technology. Thesis: Time Series Classification in Complex Fourier Space Supervisors: Prof. Dr. Michael Biehl and MSc. Friedrich Melchert
09/2014-04/2015	**C++**, *University of Groningen*, Given by Prof. Dr. F.B. Brokken.
08/2007-07/2013	**High School**, *Stedelijk Gymnasium (Grammar school)*, Leeuwarden, Degree: Nature and Technology + Health (Dutch: Natuur en Techniek + Gezondheid (NT/NG)). Additional courses: Computer Science and Economics

Teaching

09/2016-11/2016	**Teaching Assistant Information Security**, *Bernoulli Institute for Mathematics, Computer Science and Artificial Intelligence*, University of Groningen, The Netherlands.
09/2017-11/2017	**Teaching Assistant Information Security**, *Bernoulli Institute for Mathematics, Computer Science and Artificial Intelligence*, University of Groningen, The Netherlands.

Awards

2017	**Best paper award**, *Computer Science Student Colloquium*, Paper: Segmentation of Blood Vessels in Retinal Fundus Images.
2016	**Best presentation award**, *BSc. thesis symposium*, Thesis: Time Series Classification in Complex Fourier Space.

Languages

Dutch (mother tongue), English (fluent), German (Limited Working Proficiency)

Publications

2019	Straat, M. and M. Biehl. "On-line learning dynamics of ReLU neural networks using statistical physics techniques". In: *Proc. European Symposium on Artificial Neural Networks (ESANN) 2019, Bruges/Belgium*. Ed. by M. Verleysen.
	Straat, M., M. Kaden, et al. "Learning Vector Quantization and relevances in complex coefficient space". In: *Neural Computing and Applications (NCAA)*.

2018   Straat, Michiel et al. "Statistical Mechanics of On-Line Learning Under Concept Drift". In: *Entropy* 20.10. ISSN: 1099-4300. DOI: 10.3390/e20100775. URL: http://www.mdpi.com/1099-4300/20/10/775.

2017   Straat, M., M. Kaden, et al. "Prototypes and matrix relevance learning in complex fourier space". In: *2017 12th International Workshop on Self-Organizing Maps and Learning Vector Quantization, Clustering and Data Visualization (WSOM)*, pp. 1–6. DOI: 10.1109/WSOM.2017.8020019.