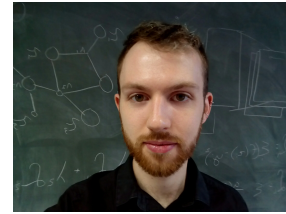


# Dennis G Wilson, PhD

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## EDUCATION

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- 2016-2019 **PhD in the REVA team, IRIT, University of Toulouse, France**  
“Evolving Principles of Artificial Neural Design,” advised by Sylvain Cussat-Blanc and Hervé Luga
- 2010-2014 **BSci in Electrical Engineering and Computer Science, MIT, Cambridge, USA**

## ACADEMIC POSITIONS

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- 2019-present **Associate Professor at ISAE-SUPAERO**  
Associate Professor of Artificial Intelligence and Big Data, part of the Supaero Reinforcement Learning Initiative
- 2019 **Postdoctoral researcher at University of Toulouse**  
Research on the application of genetic programming to electrical grid crisis management
- 2016-2019 **Lecturer at University of Toulouse**  
Teaching Master’s classes in Machine Learning and Databases
- 2012-2013 **Researcher at MIT Research Lab for Electronics, Center for Excitonics**  
Research on spin-coat manufacturing for exciton-based organic solar cells
- 2011-2014 **Researcher at MIT Computer Science and Artificial Intelligence Lab, ALFA group**  
Optimization using distributed evolutionary algorithms and genetic regulatory networks and data classification with genetic algorithms, advised by Kalyan Veeramachaneni and Una-May O’Reilly

## INDUSTRY EXPERIENCE

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- 2019-present **CTO at Nautilia Computing, Toulouse, France**  
Artificial Intelligence consulting and services for planetary observation and simulation
- 2014-2016 **Software engineer at Infinidat LTD, Israel**  
Full time position in infrastructure development for data storage systems

## TEACHING

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- 2019-present **Artificial Intelligence and Big Data, ISAE-SUPAERO**  
Teaching Master’s courses on algorithms in machine learning, data structures and engineering, programming, and computational frameworks in the Department of Complex Systems Engineering
- 2018-2019 **Computational Intelligence, Lecturer, University of Toulouse**  
Designed a new Master’s course on Machine Learning as part of a Computational Intelligence unit
- 2016-2018 **Databases, Lecturer, University of Toulouse**

## ADVISING

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- 2019 **Mahmoud Al Najjar**  
Master’s internship with LEGOS, an oceanography agency in Toulouse, on bathymetry using deep learning.
- 2018 **Guillaume Boehm**  
Undergraduate internship on Virtual Creature Evolution, co-advised by Sylvain Cussat-Blanc
- 2017 **Paul Carfantan**  
Undergraduate thesis on Image Generation with Deep Neural Networks, co-advised by Sylvain Cussat-Blanc

## SUMMARY OF PUBLICATIONS

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Publications in peer reviewed international journals	1 + 1 submitted
Full publications in peer reviewed international conferences	5 (A) + 1 (B)
Poster and abstract publications in peer reviewed international conferences	3 (A)
Publications in peer reviewed international workshops	3
Book chapters	1 + 1 submitted

## SELECTED PUBLICATIONS

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- 2019 Miller, Julian F., Dennis G. Wilson, and Sylvain Cussat-Blanc. "Evolving Developmental Programs That Build Neural Networks for Solving Multiple Problems." *Genetic Programming Theory and Practice XVI*. Springer, Cham, 2019. 137-178.
- 2018 Wilson, Dennis G., et al. "Evolving simple programs for playing Atari games." *Proceedings of the Genetic and Evolutionary Computation Conference*. ACM, 2018.
- 2018 Wilson, Dennis G, et al. "Evolutionary computation for wind farm layout optimization." *Renewable energy* 126 (2018): 681-691.
- 2017 Wilson, Dennis G. "The ethics of automated behavioral microtargeting." *AI Matters* 3.3 (2017): 56-64.
- 2017 Wilson, Dennis G., et al. "Learning aquatic locomotion with animats." *Artificial Life Conference Proceedings 14*. MIT Press, 2017.
- 2017 Miller, Julian F., and Dennis G. Wilson. "A developmental artificial neural network model for solving multiple problems." *Proceedings of the Genetic and Evolutionary Computation Conference Companion*. ACM, 2017.
- 2017 Disset, Jean, et al. "A comparison of genetic regulatory network dynamics and encoding." *Proceedings of the Genetic and Evolutionary Computation Conference*. ACM, 2017.
- 2014 Wilson, Dennis, et al. "A continuous developmental model for wind farm layout optimization." *Proceedings of the 2014 Annual Conference on Genetic and Evolutionary Computation*. ACM, 2014.
- 2014 Wilson, Dennis, et al. "On learning to generate wind farm layouts." *Proceedings of the 15th annual conference on Genetic and evolutionary computation*. ACM, 2013.
- 2013 Wilson, Dennis, Kalyan Veeramachaneni, and Una-May O'Reilly. "Cloud scale distributed evolutionary strategies for high dimensional problems." *European Conference on the Applications of Evolutionary Computation*. Springer, Berlin, Heidelberg, 2013.

## INVITED TALKS

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- 2018 Julia for Machine Learning, ANF APSEM 2018, CNRS, Toulouse
- 2018 Evolving simple programs for playing Atari games, REAL lab, IT University of Copenhagen
- 2017 Evolving neural programs for continuous learning, CSAIL, MIT
- 2017 Introduction to the Julia language, IRIT, University of Toulouse
- 2016 Introduction to Deep Learning, IRIT, University of Toulouse
- 2012 Optimization of wind farm turbine placement, MIT Energy Night

## ORGANIZATIONS

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- 2018-2019 Editorial Board member, Press Start journal
- 2017-2018 Communications Chair, ISAL Student group