

Dennis G Wilson, PhD

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<https://d9w.github.io>



ACADEMIC POSITIONS

- 2019-present **Associate Professor at ISAE-SUPAERO**
Associate Professor of Artificial Intelligence and Data Science in the Complex Systems Engineering Department, associated with Supaero Reinforcement Learning Initiative, IRIT and ANITI. Tenure obtained in 2022.
- 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
- 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

- 2019-2021 **Co-Founder at Nautilia Computing, Toulouse, France**
Artificial Intelligence consulting and services for environment observation and simulation
- 2014-2016 **Software engineer at Infinidat LTD, Israel**
Full time position in infrastructure development for data storage systems

EDUCATION

- 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**

TEACHING

- 2019-present **Artificial Intelligence and Data Science, ISAE-SUPAERO**
Head of a 240 hour Master's level program on AI and data science with 60 students
- 2018-2019 **Computational Intelligence, Lecturer, University of Toulouse**
- 2016-2018 **Databases, Lecturer, University of Toulouse**
- 2014 **Introduction to Python, Teaching Assistant, MIT**

ADVISING

- 2023-present **Estelle Chigot**
PhD in generative AI for learning with synthetic data, with ANITI and Airbus
- 2022-present **Paul-Antoine le Tolguenec**
PhD in reinforcement learning for autopilot testing, with ANITI and Airbus
- 2021-2023 **Valerii Sukhorukov**
Postdoctoral research in modelling neural cultures with ANNs, with IRIT
- 2021-2022 **Erwan Lecarpentier**
Postdoctoral research in genetic programming for interpretable control, with IRT and IRIT
- 2021-present **Paul Templier**
PhD in evolutionary strategies for neuroevolution

2020-present Mahmoud Al Najar

PhD in AI for coastal geography estimation and forecasting, with the CNES and IRD

2020-present Kaitlin Maile

PhD in developmental neural networks, with IRIT

GRANTS, HONORS & AWARDS

2022 CIFRE thesis grant with Airbus
2021 CIFRE thesis grant with ANITI and Airbus
2020 Winner, GECCO competition on agent control in DOTA
2020 SIGEVO Best Dissertation Award
2019 Thesis grant from the CNES on shoreline forecasting
2019 Thesis grant from La Région Occitane and ISAE-Supaero on neuroevolution
2017 SIGEVO student representative, ACM Turing Award Celebration
2017 Winner, SIGAI Essay Contest on Ethics and AI
2015 CIMI Doctoral Fellowship recipient, France
2013 Best paper nomination, GECCO 2013 GDS track

INVITED TALKS

2023 Keynote, Evolutionary Reinforcement Learning Workshop, GECCO 2023
2021 Evolutionary Reinforcement Learning, Reinforcement Learning Virtual School
2018 Julia for Machine Learning, ANF APSEM 2018, CNRS, Toulouse
2018 Evolving simple programs for playing Atari games, IT University of Copenhagen
2017 Evolving neural programs for continuous learning, CSAIL, MIT

ORGANIZATIONAL ROLES

2022-present Organizer, Graph Genetic Programming Workshop
2021-present Mentor, Climate Change AI Workshop
2021-2023 ISAE Representative, AI for the Environment Committee (ENVIA)
2021-2022 Secretary, ISAL Diversity, Equity, and Inclusion Committee
2019-2021 Chair, Complex Systems Track, GECCO
2018-2020 Organizer, Developmental Neural Networks Workshop
2017-2018 Communications Chair, ISAL Student group