Guillermo A. Pérez — CV

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Education

Université libre de Bruxelles (ULB)	**Brussels, Belgium**
Ph.D. Computer Science	*2012–2016*
National Tsing-Hua University (NTHU)	**Hsinchu, Taiwan**
M.Sc. Information Systems and Applications	*2010–2012*
Universidad Tecnológica Centroamericana (UNITEC)	**Tegucigalpa, Honduras**
*B.Sc. Computer Science, **Summa cum Laude***	*2005–2009*

Awards and Scholarships

o Outstanding Paper Award – AAAI Conf. on AI (AAAI) — 2025
o Best Paper Award – Int'l Conf. on Formal Modeling & Analysis of Timed Sys. (FORMATS) — 2023
o Outstanding Teaching Award within the Faculty of Science, University of Antwerp — 2021
o Fondation Wiener-Anspach Post-Doctoral subsidy — 2017
o Kurt Gödel medal for my synthesis tool AbsSynthe at FLoC Olympic Games — 2014
o Fonds de la Recherche Scientifique (F.R.S.-FNRS) Aspirant fellowship — 2014–2018
o International Cooperation and Development Fund (ICDF) scholarship — 2010–2012

Employment

University of Antwerp	**Antwerp, Belgium**
Tenured Associate Professor	*October 2023–present*
University of Antwerp	**Antwerp, Belgium**
Tenure-Track Assistant Professor	*October 2018–2023*
Université libre de Bruxelles	**Brussels, Belgium**
Research Assistant (supported by F.R.S.-FNRS)	*January 2017–October 2018*
University of Oxford	**Oxford, United Kingdom**
Visiting Researcher	*2017*
Informática Atlántida	**Tegucigalpa, Honduras**
Software Engineer	*2008–2010*

Membership in Scientific Societies

Member of ELLIS: European Laboratory for Learning and Intelligent Systems	**Europe**
Working with colleagues in Europe on formal methods for and with artificial intelligence	*2023–present*
Member of the NEXOR consortium	**Antwerp, Belgium**
Working on the next generation of cyber-physical systems at the University of Antwerp	*2021–present*
Member of Flanders Make core lab at the University of Antwerp	**Antwerp, Belgium**
The Flemish strategic research center for the manufacturing industry	*2020–present*

Languages

English: Fluent	**French:** Fluent
Dutch: Fluent	**Mandarin Chinese:** Intermediate
Spanish: Native	**German:** Basic

Supervision

Post-doctoral researchers

o Dr. Marnix Suilen	*2024–present*

PhD students

o Allen Joseph (with Dr. Filiot at ULB)	*2024–present*
o Kasper Engelen	*2022–present*
o Shrisha Rao	*2021–present*
o Ramesh Krishnamurthy (with Prof. Denil at UAntwerp)	*2021–present*
o Dr. Gaëtan Staquet (with Prof. Bruyère at UMons)	*2020–2024*
o Dr. Tim Leys	*2020–2024*
o Dr. Florent Delgrange (with Prof. Nowé at VUB)	*2020–2024*
o Dr. Dennis Gross (with Prof. Jansen at Radboud)	*2019–2024*
o Dr. Ritam Raha (with Dr. Fijalkow at LaBRI, Bordeaux)	*2019–2023*
o Dr. Raphaël Berthon (with Prof. Raskin at ULB)	*2018-2022*

Teaching and Service

Bachelor's courses taught at UAntwerp

o Theoretical Computer Science Seminar (2nd Sem.)	*2024–present*
o Compilers (1st Sem.)	*2019–present*

Master's courses taught at UAntwerp

o Mathematical Foundations of Reinforcement Learning (1st Sem.)	*2021–present*
o Specification and Verification (1st Sem.)	*2019–present*
o Programming Paradigms (2nd Sem.)	*2019–present*

Service at UAntwerp

o Member of the Pre-Screening Commission for Int'l Masters' Programs in CS	*2018–present*
o CS-Department Planning Manager for Students and Assistants Supporting Courses	*2025–present*

Other service

o Scientific Advisor of ReqCon.ai in ELSA-ai.eu Funded Project	*2025*

Service to the Community

Invited talks

The Reactive Synthesis Competition (SYNTCOMP): 2018-2021	**Germany**
Automated Synthesis: Functional, Reactive and Beyond - Dagstuhl Seminar (24171)	*2024*
Parameter Synthesis for One-Counter Automata	**France**
10th International Workshop on Weighted Automata: Theory and Applications	*2021*
Regret Minimization in Discounted-Sum Games	**Belgium**
International Symposium on Games, Automata, Logics, and Formal Verification (GandALF)	*2020*
Revisiting Synthesis for One-Counter Automata	**Germany**
22nd International Workshop on Verification of Infinite-State Systems	*2020*

Optimizing Expectation with Guarantees in POMDPs ___Belgium___
Workshop: Theory and Algorithms in Graph and Stochastic Games ___2019___

Graph-Based Reductions for Model Checking and Learning MDPs ___Germany___
Machine Learning and Model Checking Join Forces - Dagstuhl Seminar (18121) ___2018___

Competition organizer

Annual Reactive Synthesis Competition, with S. Jacobs, P. Schlehuber-Caissier
SYNTCOMP is affiliated with the conference CAV, `https://www.syntcomp.org/` ___2019–present___

Steering committee member

o The International Conference on Quantitative Evaluation of SysTems (QEST) ___2023–2027___

Program chair

o Organizer of the "The Futures of Reactive Synthesis" Dagstuhl seminar (23391), with N. Fijalkow, B. Finkbeiner, and E. Polgreen ___2023___
o General & program chair of the Int'l Conf. on Concurrency (CONCUR) 2023, with J.-F. Raskin ___2023___
o Workshop chair of the Federated Logic Conference (FLoC) 2022, joint with S. Almagor ___2022___
o Program chair of the Workshop on Synthesis (SYNT 2021), joint with E. Polgreen ___2021___
o Organizer of SYNTCOMP Camp, a satellite tutorial of ETAPS 2019 ___2019___

Program committee member

o 32st Int'l Conf. on Tools & Algorithms for the Construction & Analysis of Systems (TACAS 2026) ___2026___
o 50th International Symposium on Mathematical Foundations of Computer Science (MFCS 2025) ___2025___
o 7th Int'l Symposium on AI Verification (SAIV 2024) ___2024___
o 35th Int'l Conference on Concurrency Theory (CONCUR 2024) ___2024___
o 23rd Int'l Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2024) ___2024___
o 32nd EACSL Annual Conference on Computer Science Logic (CSL 2024) ___2024___
o 34rd Benelux Conf. on AI and the 31th Belgian Dutch Conf. on ML (BNAIC/BeNeLearn 2022) ___2022___
o 18th Conference on Formal Modeling and Analysis of Timed Systems (FORMATS 2020) ___2020___
o Int'l Conference on Applications and Theory of Petri Nets and Concurrency (PN) ___2024, 2025___
o AAAI Conference on Artificial Intelligence (AAAI) ___2021, 2022, 2023___
o Conference on Reachability Problems (RP) ___2019, 2022, 2025___
o Int'l Symp. on Games, Automata, Logics, and Formal Verif. (GandALF) ___2021, 2022, 2023, 2024___
o Workshop on Synthesis (SYNT) ___2019, 2022, 2024, 2025___

Artifact evaluation chair

o 29th Int'l Conf. on Foundations of Software Sci. & Computation Structures (FoSSaCS 2026) ___2026___

Research Grants

PI of Synthesis of reactive systems from formal specifications and examples (SynthEx) ___€194K___
Funded by the Research Foundation - Flanders (FWO) at UAntwerp ___2024–2027___

co-PI of Infectious disease economics and AI with guarantees (DESCARTES) ___€800K___
Funded by the Inter-university Research Fund (iBOF), Flanders, Belgium ___2021–2024___

co-PI of Deterministic and inexpensive realizations of advanced control (DIRAC-SBO) ___€468K___
Funded by Flanders Make, the strategic research center for the Flemish manufacturing industry ___2020–2023___

PI of Safe Artificial Intelligence and Learning for Verification (SAILor) ___€254K___
Funded by the Research Foundation - Flanders (FWO) at UAntwerp ___2020–2023___

PI of Counter-Automata Algorithms for Software Verification Tools (CAST) ___€205K___
Funded by the University Research Fund (BOF) at UAntwerp ___2019–2023___