

David JULIEN

permalink
updated: 2025-02-25

CONTACT

LABORATORY: Laboratoire des Sciences du Numérique de Nantes/Nantes Université
EMAIL: david.julien@univ-nantes.fr
WWW: <https://www.davidjulien.xyz>

EDUCATION

- | | |
|-------------|---|
| 2022 - NOW | PhD in Computer Science <i>Nantes Université-Laboratoire des Sciences du Numérique de Nantes</i>
Probabilistic abstraction and verification of non-linear hybrid dynamical systems
<u>Advisors:</u> Benoît DELAHAYE (dir.), Gilles ARDOUREL and Guillaume CANTIN |
| 2020 - 2022 | M.Sc. in Computer Science <i>Université Claude Bernard Lyon 1 & École Normale Supérieure de Lyon</i>
Concepts and Applications |
| 2019 - 2020 | B.Sc. in Computer Science <i>Université Claude Bernard Lyon 1</i>
minor: Mathematics |

JOURNAL PUBLICATIONS

- [1] D. Julien, G. Ardourel, G. Cantin, and B. Delahaye, “End-to-End Statistical Model Checking for Parameterization and Stability Analysis of ODE Models,” *ACM Transactions on Modeling and Computer Simulation*, Mar. 2023, ISSN: 1049-3301. DOI: [10.1145/3649438](https://doi.org/10.1145/3649438). [Online]. Available: <https://hal.science/hal-04478120>.

CONFERENCE PUBLICATIONS

- [2] D. Julien, G. Cantin, and B. Delahaye, “End-to-End Statistical Model Checking for Parametric ODE Models,” in *QEST: International Conference on Quantitative Evaluation of Systems*, E. Ábrahám and M. Paolieri, Eds., ser. Lecture Notes in Computer Science, vol. 13479, Warsaw, Poland: Springer International Publishing, Sep. 2022, pp. 85–106, ISBN: 978-3-031-16336-4. DOI: [10.1007/978-3-031-16336-4_5](https://doi.org/10.1007/978-3-031-16336-4_5). [Online]. Available: <https://hal.archives-ouvertes.fr/hal-03824899>.

SELECTED TALKS

- | | |
|------------|---|
| JUNE 2022 | MOVEP: Summer School on Modelling and Verification of Parallel Processes
<i>Aalborg, Denmark</i>
“End-to-End Statistical Model Checking for Parametric ODE Models” |
| SEPT. 2022 | QEST: International Conference on Quantitative Evaluation of Systems
<i>Warszawa, Poland</i>
“End-to-End Statistical Model Checking for Parametric ODE Models” |

INTERNATIONAL COLLABORATIONS

- | | |
|---------------------|---|
| JUNE - AUG.
2024 | Visiting student <i>with Prof. Maas, A. and Dr. Mendoza, S. at Center for Mathematical Modeling, Santiago, Chile</i>
Hybrid Systems as a formalization of metabolic processes |
|---------------------|---|

CONFERENCE COMMITTEE

JUNE 2024 | **EJCIM** *Nantes, France*
Summer School for Young Searchers in Computer Science and Mathematics

EXPERIENCE

FEB. - JULY 2022 | **Research intern** *Laboratoire des Sciences du Numérique de Nantes, France*
“End-to-End Statistical Model Checking for Parametric ODE Models” [2]

JUNE - AUG. 2020 | **Research intern** *Université Gustave Eiffel, Bron, France*
Analysis of medical data using **MNE** (Python)

TEACHING EXPERIENCE

FALL 2024 | **Modeling & Model Checking** *M.Sc. level, 1st year*
Teaching assistant

| **General Mathematics for Computer Science** *B.Sc. level, 1st year*
Teaching assistant

| **Algorithmics & Software Development for Sciences** *B.Sc. level, 1st year*
Teaching assistant

| **Introduction to Computer Science** *B.Sc. level, 1st year*
Teaching assistant

SPRING 2024 | **Introduction to Software Development** *B.Sc. level, 1st year*
Teaching assistant

FALL 2023 | **Algorithms & Data Structures** *B.Sc. level, 3rd year*
Teaching assistant

| **Introduction to Computer Science** *B.Sc. level, 1st year*
Teaching assistant

SPRING 2023 | **Algorithmic & Data Structures** *B.Sc. level, 2nd year*
Teaching assistant

| **Introduction to Software Development** *B.Sc. level, 1st year*
Teaching assistant

FALL 2022 | **Introduction to Computer Science** *B.Sc. level, 1st year*
Teaching assistant

| **Introduction to Computer Science for Biologists** *B.Sc. level, 1st year*
Teaching assistant

LANGUAGES

HUMAN | French (mothertongue), English (spoken, written - TOEIC 985), German (basics)

MACHINE | Rust, C/C++, bash/shell, Python