Julien Martinelli

PhD graduate

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Born 05/26/1994

Experience

Feb. 2022 - **Postdoctoral Researcher**, Aalto University, Probabilistic Machine Learning team, Helsinki.
Supervised by Samuel Kaski, Markus Heinonen and Vikas Garg

Education

Oct. 2018 - **PhD in Computer Science**, *On learning mechanistic models from time series
Feb. 2022 data with applications to personalised chronotherapies*, Inria Saclay, Institut Curie Saint-Cloud, École polytechnique.
Supervised by François Fages and Annabelle Ballesta

Apr.-Sept. **Summer Intern**, *Learning mechanistic models from time series data*, Inria Saclay,
2018 Lifeware Team.
Supervised by François Fages

2017 – 2018 **Masters in Random Modelling, Finance and Data Science, M2MO**, *Data Science track*, Université de Paris.

May-July **Summer Intern**, *Random matrix theory, Application to community detection
2017 within networks*, Laboratoire MAP5, Université de Paris.
Supervised by Manon Defosseux

2016 – 2017 **First year of Masters in Applied Mathematics**, Université de Paris.
ranked 1st

2012 – 2015 **BSc. Mathematics**, Université de Paris.

Publications

Publications

2022 **Accelerating metabolic models evaluation with statistical metamodels: application to Salmonella infection models**, *Clémence Frioux, Sylvie Huet, Simon Labarthe, Julien Martinelli, Thibault Malou, David Sherman, Marie-Luce Taupin, Pablo Ugalde-Salas.*

2021 **A mathematical model of the circadian clock and drug pharmacology to optimize irinotecan administration timing in colorectal cancer**, *Janina Hesse, Julien Martinelli, Ouda Aboumanify, Annabelle Ballesta and Angela Relógio, Computational and Structural Biotechnology.*

2021 **Model learning to identify systemic regulators of the peripheral circadian clock**, *Julien Martinelli, Xiao-Mei Li, Sandrine Dulong, Sylvain Soliman, Francis Lévi, François Fages and Annabelle Ballesta, Bioinformatics.*

Proceedings

2019 **A statistical unsupervised learning algorithm for inferring reaction networks from time series data**, *Julien Martinelli, Jeremy Grignard, Sylvain Soliman and François Fages*, ICML 2019-Workshop on Computational Biology.

2019 **On Inferring Reactions from Data Time Series by a Statistical Greedy Heuristics**, *Julien Martinelli, Jeremy Grignard, Sylvain Soliman and François Fages*, Proceedings of the Seventeeth International Conference on Computational Methods in Systems Biology, 352-355.

Submitted

2022   **Reactmine: a search algorithm for inferring chemical reaction networks from time series data**, *Julien Martinelli, Jeremy Grignard, Sylvain Soliman, Annabelle Ballesta and François Fages*, Under review.

2022   **Multi-Fidelity Bayesian Optimization with Unreliable Information Sources**, *Petrus Mikkola, Julien Martinelli, Louis Filstroff and Samuel Kaski*, Under review at AISTATS.

Oral Communications

Talks

November 2022	**AI Day**, *Helsinki.*
August 2022	**Finnish Center for Artificial Intelligence - Get together**, *Helsinki.*
July 2022	**Workshop on Hybrid models and methods in systems medicine**, *Institut Curie, Paris.*
August 2021	**CEMRACS - Data Assimilation and Reduced Modeling for High Dimensional Problems**, *Luminy.*
July 2021	**Twentieth European Conference on Computational Biology**, *Remote.*
June 2021	**Tenth biennial of the Society of Applied and Industrial Mathematics (SMAI)**, *La Grande Motte.*
May 2021	**Workshop Modelling Heterogeneous populations with applications in biology**, *Remote.*
April 2021	**Monthly seminar BIOSS-IA**, *Remote.*
May 2019	**BIOSS-IA Days**, *Laboratoire d'Informatique Fondamentale d'Orléans.*
December 2018	**BIOSS-IA Days**, *Pasteur Institute, Paris.*

Poster Sessions

July 2021	**JOBIM 2021**, *Remote.*
January 2021	**Winter school AI4Health**, *Remote.*
June 2019	**Summer School Formal Modeling of Biological Regulatory Networks**, *Porquerolles.*

Teaching

2022 – 2023	**Teaching Assistant**, *MSc.*, Advanced Probabilistic Methods, Aalto University.
2019 – 2021	**Teaching Assistant**, *2nd year BSc.*, Analysis 4, Multivariate functions, Université de Paris.
2018 – 2019	**Teaching Assistant**, *1st year BSc.*, Mathematics and Calculus 2, Université de Paris.

Programming skills

Programmation	Python, R, Matlab, LaTeX, Shell
Tools	GitHub, Vim

Languages

Native French, fluent English