



HUGO DAYEKH

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Address: Grenoble (38000)

Holder of a PhD in computer science with an initial educational background in physics, specialized in modeling and optimization of complex dynamical systems. Skilled in Python, statistical analysis, machine learning and AI, with a focus on extracting meaningful information from complex and temporal datasets. Interested in developing reliable tools that support scientific understanding and operational decision-making.

SKILLS

TECHNICAL

Skilled in **Python** including **Scikit-Learn**, **PyTorch**, **Numpy**, **Pandas**, and **Matplotlib**.
Intermediate to advanced level in **Java**, **C**, **C++**, **SQL**, and **MATLAB**.
Experience with **LLMs** and **AWS**.
Efficient in **Git** and **LaTeX**.

SOFT

Able to adapt to new programming languages and environments.
Fast learner.
Clear communicator of complex technical concepts.
Contributor to positive team dynamics.

LANGUAGES

Arabic	Native
French	Bilingual
English	Bilingual
Spanish	Beginner

OTHER ACTIVITIES

Food blogger @ [ChezHadi.com](https://www.chezhadi.com).
Member of the Verimag council.
Previous cabinet member of various student clubs and societies.
Organizer of symposiums including the 30 Years of Verimag.

HOBBIES

Cooking | Walking | Reading | Food blogging | Beyoncé

WORK EXPERIENCE

R&D ENGINEER

Verimag, Grenoble

since 12/2025

Extension of a Signal Temporal Logic (STL) monitoring tool in **C++** and **Python** for the analysis and guiding of **AI** and **Reinforcement Learning** agent behavior.

MACHINE LEARNING PHD RESEARCHER

Verimag, Grenoble

09/2021 – 05/2025

- Developed two novel **machine learning** methods for **analyzing time series data** and **modeling hybrid dynamical systems** to predict their evolution.
- Applied **data preprocessing**, **data analysis**, **active learning**, **incremental regression**, **optimization** and **classification** for system identification.
- Implemented in **Python** and tested on multiple simulated and real-world experiments, with **quantitative evaluation** and **visualization of results**.

International publications: [ADHS 2024](#); [CDC 2024](#); Springer LNCS (à paraître)

INVITED RESEARCHER

Kyoto University, Kyoto, Japan

03/2023 – 04/2023

TEACHING ASSISTANT

Université Grenoble Alpes, Grenoble

02/2022 – 12/2023

RESEARCH ASSISTANT

Inria, Grenoble

02/2021 – 08/2021

Extended a variant of relational algebra with nulls for data cleaning and preprocessing in a database. Achieved best grade.

Verimag, Grenoble

02/2020 – 07/2020

Modeled recurrent neural networks (RNNs) by learning automata over large alphabets and developed it in **Python**.

DEVELOPER

Université de Versailles, Versailles

06/2018 – 07/2018

Developed a graphical user interface for an **Apache Spark** project, using **ScalaFX**.

EDUCATION

PHD IN COMPUTER SCIENCE

Université Grenoble Alpes, Grenoble

2021 – 2025

Passive and Active Learning of Switched Nonlinear Dynamical Systems (thesis available on [HAL](#)).

MASTER IN DATA SCIENCE

Grenoble INP (ENSIMAG), Grenoble

2019 – 2021

Master of Science in Informatics at Grenoble (MoSIG); Mention: Very Good.

DOUBLE MAJOR IN PHYSICS AND COMPUTER SCIENCE

American University of Beirut (AUB), Beyrouth

2015 – 2019

Obtained with high distinction; GPA: 4.0

HONORS AND AWARDS

- International Excellence Scholarship from Grenoble INP Foundation.
- Full 4-year scholarship from the American University of Beirut.
- Mark Sawaya Excellence Award (best student in computer science at AUB).
- 4th rank across Lebanon in the Baccalaureate official exams.