133 Avenue d'Italie, Paris, 75013, FRANCE
pauldubois98@gmail.com | +33 6 89 08 94 56
https://pauldubois98.github.io

# PAUL DUBOIS

## PROFILE

*With a **mathematical** background, I am passionate about **technology** since high school. I am committed to teaching, and leveraging **science** for a better world.*

## EXPERIENCE

**(PART TIME) RESEARCH INGEENER, THERAPANACEA** Oct 2021 – Oct 2024
Developing adaptative radiotherapy optimization, using Artificial Intelligence.

**(PART TIME) FREELANCE DATA SCIENTIST** Oct 2021 – Oct 2024
Various data science projects.

**INTERN, ROOM FURNISHER** July – Sept 2020
**Created the MVP of the startup**, bringing together open-source projects.

**INTERN, AIRBUS** Jun - Sept 2019
**Designed tools for process automation** using SQL, {HTML, CSS, and JS}, and Python.

**KITCHEN CLERK, RESTAURANT "LA PLAGE"** Jun – July 2018

**DISHWASHER, RESTAURANT "LA PLAGE"** Jun – July 2017
Skills gained: Teamwork, working under time pressure & efficiency.

## EDUCATION

**MSC MATHEMATICAL SCIENCES, OXFORD** Sept 2020 – July 2021
**Grade average 68% (merit)**
*Courses: Analytic Topology, Category Theory, Approximation of Functions, Theories of Deep learning, Networks, Random Matrix Theory.*
Dissertation on Random Fractals and Branching Processes.

**MSCI MATHEMATICS, UNIVERSITY COLLEGE LONDON** Sept 2016 – July 2020
**Grade average: 85% (first)**
*Key courses: Probability, Measure Theory, Spectral Theory, Functional Analysis, Multivariable Analysis, Differential Geometry, Analytic Number Theory, Graph Theory and Combinatorics, Elliptic Curves, Commutative Algebra, High-Performance Computing, Evolutionary Games and Population Genetics.*
Research project on Modular forms mod 2: "Governing Fields for the Hecke Algebra".

## TEACHING

**DATA ANALYSIS, IRONHACK (BARCELONA)** July - Aug 2023
**9 weeks bootcamp, taught in English.**
*Content: Python, SQL, Web Scraping, Tableau, Probabilities & Statistics, Basics of AI/DL.*

**DEEP LEARNING, CENTRALESUPÉLEC (PARIS)** Jan - Apr 2023
**Course for HSB curriculum (3rd year engineering students), taught in French.**
*Content: deep learning from scratch (back-propagation), perceptron, convolutions, optimizers & learning rates, RNN, U-net, V-net, GANs; with 5 Kaggles created as homework.*

**MATHEMATICS, ESSEC (CERGY)** Sept 2021; Sept 2023
**"Mathematics Refresher" course for DSBA (Master Students), taught in English.**
*Content: basic methodologies for proofs; linear algebra, differential calculus, integration, and asymptotic analysis; prerequisites of the courses in the master.*

**TUTORIAL SESSIONS, CENTRALESUPÉLEC (PARIS)** Oct 2021 – Oct 2024
**Coding, Optimization, Algorithms & Complexity; taught in French.**

## OTHERS

**French** (Native Speaker); **English** (Fluent); ***Driving License*** *(since 2017)*
GitHub repository: https://github.com/pauldubois98