

Horace Guy

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Applied Scientist

Professional experience

**Mar 2024 -
Now**

▼ *Applied Scientist* at **Datadog** (Paris, France)

Building machine learning and algorithmically driven features for Datadog app.

- Designed an algorithm to cluster logs based on tags entropy.
- Implemented a fast learning model to detect cyberattacks in PyTorch.
- Interviewed candidates with *Data Science Fundamentals* interview.

**Sep 2023 -
Dec 2023**

▼ *Founder in residence* at **Entrepreneur First** (Paris, France)

Part of a curated community of future founders, working to build globally impactful companies together.

Formed 3 different teams tackling hard problems with software.

**May 2019 -
Feb 2023**

▼ *Data scientist* in R&D at **Deepki** (Paris, France)

Data science improving energy efficiency of buildings.

Working from research to deployment in production of machine learning models:

- A tool to query hundreds of heterogeneous databases with HTTP REST APIs
- Bayesian modelling of consumption based on location, floor area and usage
- Gap-filling of consumption data to estimate missing monthly points: 2x improvement
- Mentoring and training of interns and junior staff members

**Feb 2018 -
Aug 2018**

▼ *R&D engineer intern* at **Stratagem Technologies** (London, UK)

Predictive modelling of NBA basketball in order to advise investment decisions:

- Prediction of the number of Markov transitions remaining during a game
- Implementation of a risk controller framework with property-based and fuzz testing

**Jul 2017 - Dec
2017**

▼ *Data analyst intern* at **Amazon** (Paris, France)

In charge of business intelligence for international (EU + Japan + Canada) Ad services:

- Responsible for weekly business review, monitoring activity through KPIs
- Ad-hoc analysis on performance, revenue attribution, customer retention

**Sep 2016 -
Dec 2017**

▼ *Mathematics Teaching Assistant* at **Lycée Charlemagne** (Paris, France)

Conducting oral exams for MPSI students preparing the highly competitive entrance exams to the French engineering "Grandes Ecoles" (two hours per week)

Academic experience

2015 - 2019 ▼ *MSc Engineering* at **Ecole Centrale Paris** (now CentraleSupélec)

Major: Applied Mathematics in Data Science.

Relevant courses includes: random modelling, convex and discrete optimization, machine learning, deep learning, reinforcement learning, natural language processing.

Thesis: Detecting anomalies and monitoring urban furniture energy consumption

2013 - 2015 ▼ *Higher School Preparatory Classes* at **Lycée Charlemagne** (Paris, France)

MPSI - MP*: Two-year undergraduate intensive course in mathematics, physics, computer science. Ranked 201/3370 of Concours Centrale-Supélec national entrance exams.

Skills

Programming • Numpy, Pandas, Scikit-learn, JAX, Numpyro, PyTorch, UV
• Git, Bash, CI/CD, Unix tools, Docker, HTML & CSS & JS, Elixir, Ocaml

Language French (Native) | English (Proficient) | German (Fair)

Activities and interest

Hobbies Handball | Snowboarding | Surfing | Stand-up comedy

Activities Gala Centrale Paris (Equinoxe) student organisation (2017 President)

Publications

Peer-reviewed • Horace Guy, Simon Vittoz, Giulia Caputo, Thimothée Thiery, *Benchmarking the energy performance of European commercial buildings with a bayesian modeling framework*, Energy and Buildings, Volume 299, 2023

Other • *An introduction to Bayesian inference*
• *Kaggle: Impacts of interventions on the propagation of COVID-19 with mobility data*
• *Introduction to probabilistic programming*
• *A gradient-descent visualizer*
• *Mathematics of bookmaking*