

Louis F. Abraham

<https://louisabraham.github.io/> • <https://github.com/louisabraham/>

louis.abraham@yahoo.fr

+ 33 (0) 6 27 19 14 15

Areas of Expertise

Computer science: machine learning, algorithms, cryptography, formal methods, genetic programming, etc.

Software engineering: web development, high performance / scientific computing, information security, etc.

Economics and finance: quantitative finance, derivatives, OTC markets, blockchains, life insurance, etc.

Technology and society: algorithmic transparency, digital identity, online privacy, digital health, etc.

Experience

- Since 2021 **PhD candidate in Business Economics & Finance - Université Paris 1 Panthéon-Sorbonne**
Projects include studying ESG impact on credit risk and building a confidence index for savers.
- Since 2020 **Co-founder & Tech lead - Secrecy**
Encrypted cloud storage made simple.
- Co-founder - Gematria Technologies**
Natural Language Processing applied to finance.
- Advisor to the Chairman of the Board - Afer**
Guided Afer's strategy during the acquisition process of Aviva France (€3.2bn).
Administrator of Afer's endowment funds and Afer Premium (net assets €150m).
- Independent researcher** (machine learning, computer science, blockchain, etc.)
Co-authored papers with Rob Tibshirani (Stanford) and Bernhard Schölkopf (MPI); published in **JMLR**.
- Since 2019 **Independent consultant**
Advising leading organizations like Servier Laboratories and Afer about technology and finance.
- 2020 **Economist - Paris School of Economics / Bank of France**
Competition analysis on the over-the-counter credit default swap market.
- 2019 **Study on Telecommuting in France - HEC Paris**
Co-written with Jules Pondard.
- 2018 **Deep Learning Researcher - ENS Ulm / EHESS / CNRS**
Probing the internal structure of self-supervised representations using ABX-discriminability.
- 2017 **Study on Digital Identity in France - French Ministry of the Interior (CHEMI)**
e-FICC Quant Researcher - BNP Paribas CIB, London
- 2017 - 2018 **Founder & Head of BADaS (Binet Algorithmes et Data Science) - École polytechnique**
Student association for competitive programming, data science and CS events.
- 2016 - 2017 **Oral examiner in mathematics - Lycée Louis-Le-Grand (Paris)**
- 2015 - 2016 **Administrative analyst - French Ministry of Foreign Affairs**
- 2015 **French army officier training - École polytechnique**

Education

- 2018 - 2020 **Master of Science ETH in Computer Science - ETH Zurich**
ETH Zurich ranks as one of the best universities in the world [link].
Master Thesis obtained with a perfect grade (6.0/6.0).
- 2015 - 2019 **Ingénieur Polytechnicien - École polytechnique (Palaiseau)**
Master's degrees in computer science and mathematics from France's top scientific school.
Youngest candidate accepted (became senior bachelor student when 17 years old).
- 2013 - 2015 **Classe préparatoire aux Grandes Écoles MP-Info - Lycée Louis-Le-Grand (Paris)**
- since 2007 **Music** (piano, harmony, analysis, conducting and other topics) - Conservatoire de Paris

Awards

- **ICPC World Finalist 2021, High Honors:** Oldest, largest and most prestigious programming contest in the world. Ranked **24th worldwide** against 60,000 other students in teams of 3 and achieved **France's all-time record**. Also **SWERC Gold Medalist** and **Southwestern Europe Champion** (2019).
- **Concours Général:** Most prestigious academic competition in France. Distinction in Mathematics (2013), youngest laureate of all subjects.

Others

- Languages** French (native speaker), German (Goethe-Zertifikat C1), English (TOEFL 110/120).
- Music** Piano: winner of international contests, concert soloist with orchestral accompaniment.
- Sports** Horse riding, Skiing, Swimming, Scuba diving.
- Hobbies** Literature, Philosophy, Competitive programming, Anime, Video games.
-