# Louis F. Abraham

**All-time France record holder at ICPC World Finals**
**1000+ stars on GitHub − 150+ academic citations**
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, NLP, algorithms, cryptography, formal methods, computational game theory.
**Software engineering**: web development, high performance / scientific computing, information security.
**Economics and finance**: quantitative finance, derivatives, OTC markets, blockchains, life insurance.
**Technology and society**: algorithmic transparency, digital identity, online privacy, digital health.

## Experience

| | |
|---|---|
| Since 2024 | **Head of LLM & Gen AI** - Tiime<br>Leading the technological strategy and implementation of generative artificial intelligence. |
| Since 2023 | **Co-founder** - Secrecy |
| Since 2022 | **Member of the Board** - Afer<br>Life-insurance association of 800,000 people handling €60bn of investments.<br>In charge of strategy, products, sustainable investing and digital transformation. |
| 2020 - 2023 | **Co-founder & CTO** - Secrecy<br>Encrypted cloud storage for developers made simple. Raised €1m from top-tier investors.<br>**Co-founder & CTO** - Gematria Technologies<br>Developed state of the art NLP pipelines for asset managers. |
| 2020 - 2022 | **Advisor to the Chairman of the Board** - Afer<br>Guided Afer's strategy during the acquisition process of Aviva France (€3.2bn).<br>Administrator of Afer's endowment funds and Afer Premium (net assets €300m). |
| 2020 | **Economist** - Paris School of Economics / Bank of France<br>Studied counterparty choice in the over-the-counter credit default swap market using EMIR data. |
| 2018 | **Deep Learning Researcher** - ENS Ulm / EHESS / CNRS<br>Conducted research in cognitive machine learning and computer vision under Emmanuel Dupoux. |
| 2017 | **e-FICC Quant Researcher** - BNP Paribas CIB, London |
| 2015 - 2016 | **Administrative analyst** - French Ministry of Foreign Affairs |
| 2015 | **French army officer training** - École polytechnique |

## Education

| | |
|---|---|
| 2023 | **Certificate in Insurance Company Board Governance** - French Institute of Actuaries<br>Executive education program in partnership with IFA (French Institute of Directors). |
| 2021 - 2024 | **PhD in Business Economics & Finance** - Université Paris 1 Panthéon-Sorbonne<br>Applications of computational game theory to economics and finance. Teaching assistant in Finance. |
| 2018 - 2020 | **Master of Science ETH in Computer Science** - ETH Zurich<br>ETH Zurich ranks as one of the best universities in the world [link].<br>Master Thesis obtained with a perfect grade (6.0/6.0). |
| 2015 - 2019 | **Ingénieur Polytechnicien** - École polytechnique (Palaiseau)<br>Master's degrees in computer science and mathematics from France's top scientific school.<br>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) |

## Other activities

- **Independent researcher** (machine learning, computer science, blockchain, economics): publications in **JMLR** and **NeurIPS**. More than 150 citations. Co-authors include Rob Tibshirani (Stanford) and Bernhard Schölkopf (MPI).
- **Open-source contributor**: more than 1000 stars on GitHub. Author of lassonet, ffpass, algnuth, har2requests, fastnode2vec and pydivsufsort.
- **Reserve Officer of the French National Gendarmerie**: cybersecurity and ML applied to forensics. Rank of Captain.

## 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. |