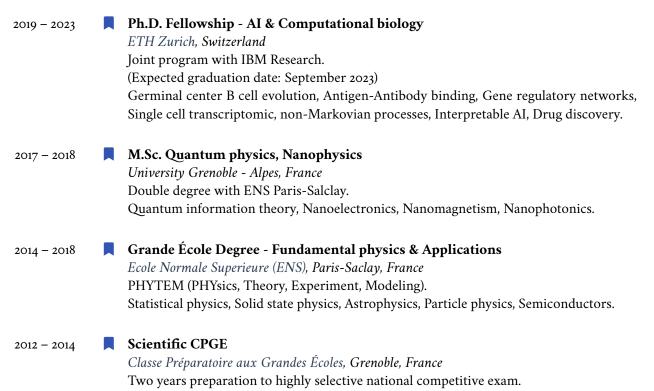
Aurelien Pelissier, Ph.D.

02/17/1994

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	https://www.aurelienpelissier.com				
S	Google Scholar	(C)	Github		
in	Linkedin	Μ	Medium		

Education



Work Experience

Academic

2019 – 2023 Rh.D. Fellowship - AI & Computational Biology

IBM Research Zurich, Switzerland

SysBio Life Science department – Maria Rodriguez Martinez.

By combining mathematical modeling and artificial intelligence with the analysis of gene expression and RNA sequencing data, my work aims to unravel the complex mechanisms at the heart of our immune system, which contributes to the understanding of major diseases, such as lymphatic cancer, autoimmune diseases and HIV. My research covers B cell evolution in Germinal center [4, 5, 8], Antigen-Antibody binding [1, 3], Gene regulatory networks [2], Single cell transcriptomic analysis, and non-Markovian dynamics [6].

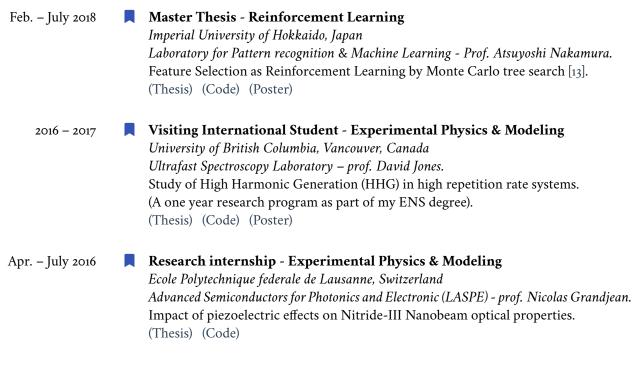
2018 - 2019

Research Fellowship - AI & Raman Spectroscopy

Imperial University of Hokkaido, Japan
Molecule & Life nonlinear science laboratory – Prof. Tamiki Komatsuzaki.
Development of Accelerated Measurement Technology for Cancer Diagnosis by bridging Single-Cell Raman Imaging and Information Science [7, 9].



Work Experience (continued)



Blockchain & Others

2020 – Onward Quantitative Trader & Investor Combining in-depth analysis of the emerging crypto currency market with various quantitative approach to develop investing and trading strategies relying on statistical arbitrage and the tracking of social media activity [10, 12]. (https://www.aaalgo-trading.com)

2022 – Onward

Co-Founder - Peer2Panel

The company aims at making investment in renewable energy secured, transparent and accessible to customers with capital of any size. With the acquisition of tokens backed by fractions of physical solar panels, clients can grow a renewable energy portfolio easily and affordably through the Ethereum blockchain [11]. (https://www.peer2panel.com)

Web3 Full Stack Developer - DeFi & NFTs

Coding smart contracts and user interfaces in the context of several projects participant of the Swiss blockchain Hackathon or Moralis Avalanche Hackathon. In addition to Peer2Panel, another established project is NFcop, which aims at bridging the gap between copyright and NFT.

(https://nfcop.com)

Medium Writer

Writing articles about diverse topics, including data science, blockchain, physics, economy and philosophy. The purpose of these articles is mainly to share my findings resulting from extensive research and reflections, so that it can benefit the ones who wonder about similar questions. These take the form of tutorials, pedagogic explanations, or opinion essays.

(https://aurelien-pelissier.medium.com/)

Skills & Interests

Languages	French (native), English (fluent - C2), Chinese (intermediate - B1) Japanese (basic - A2).
Coding (Academic)	Python, R, C++, Matlab, Fortran. Stochastic processes, Bayesian statistics, Interpretable ML, Deep & Reinforcement learning, Computer vision, LSTM.
Web3 Full Stack Dev.	JavaScript, React, Нтмг, Solidity, Mysql, IPFS.
Blockchain	EVM Smart contracts, NFT, DeFi, Chainlink VRF & price feeds. (ERC20 Liquidity pools, ERC721 & ERC1155 minting).
Hobbies	Outdoor sports, Breakdance, Painting. Strategy games (Chess, Go, Xiangqi), Rubik's cube.

Relevant Publications

Computational Biology

- Anang, D.*, **Pelissier, A.***, Kraner, A., Cohelo, A., Rodriguez Martinez, M., & Niek, d. V. (2023). ACPA collagen in Rheumatoid Arthisis in mice. *Frontier in immunology*. Retrieved from *S* submitted
- 2 **Pelissier**, A., Laragione, T., Gulko, P., & Rodriguez Martinez, M. (2023). Cell-type specific gene regulatory analysis in Rheumatoid Arthritis identifies BACH1 as a key regulator in synovial fibroblast. *Frontier in immunology*. Retrieved from *Submitted*
- **3 Pelissier**, **A.**, Robert, P., & Rodriguez Martinez, M. (2023). Towards an accurate 3d structural antigen-antibody affinity model. *Frontier in immunology*. Retrieved from *I* submitted
- 4 Luo, S.*, **Pelissier, A.***, & Rodriguez Martinez, M. (2022). Quantifying B cell clonal diversity in repertoire data. *Frontier in immunology*. Retrieved from *S* submitted
- **Pelissier**, A., Stratigopoulou, M., Dimitriadis, E., Bende, R., van Noesel, C., Rodriguez Martinez, M., & EJ Guikema, J. (2022). Germinal centers convergent evolution and memory B-cell reentry in human lymph nodes. *Molecular Biology and Evolution*. Retrieved from *S* submitted
- 6 **Pelissier, A.***, Slav, M.*, Beerenwinkel, N., & Rodriguez Martinez, M. (2022). Practical simulations of non-markovian stochastic processes and applications. *Proceedings of the National Academy of Sciences*. Retrieved from *S* submitted
- 7 Taylor, J. N., **Pelissier**, **A.**, Mochizuki, K., Hashimoto, K., Harada, Y., Fujita, K., ... Komatsuzaki, T. (2022). Standardization of Raman hyperspectral images across measurements and devices through extrinsic background correction. *Analytical Chemistry*. Retrieved from *S* submitted
- Pelissier, A., Akrout, Y., Jahn, K., Kuipers, J., Klein, U., Beerenwinkel, N., & Rodriguez Martinez, M. (2020). Computational model reveals a stochastic mechanism behind germinal center clonal bursts. *Cells*, *9*(6), 1448. *O* doi:10.3390/cells9061448
- Pelissier, A., Hashimoto, K., Mochizuki, K., Kumamoto, Y., Taylor, J., Fujita, K., ... Komatsuzaki, T. (2019). Heterogeneous spatial distribution of carcinogenic area in single cells Raman images for the diagnosis of thyroid cancer. arXiv preprint. Retrieved from *O* https://arxiv.org/abs/1904.05675

Others

Awad, A., & **Pelissier**, **A.** (2023). Sentiment analysis of the cryptocurrency market with statistical test. In *Cryptocurrency report*. Retrieved from *I* submitted

Lehner, J., Pelissier, A., Li, C., & Lehner, S. (2022). Peer2Panel: Democratizing renewable energy investment with liquid and verifiable tokenized solar panels. *Whitepaper*. Retrieved from *S* https://drive.google.com/file/d/1KwQisfqb_MywtBVs1qf0sjNu-ARlGPq9/view

Pelissier, **A.**, & Belleza, H. (2022). Forecasting market trends by identifying extremes in investor psychology. In *Cryptocurrency report*. Retrieved from *S* submitted

Pelissier, **A.**, Nakamura, A., & Tabata, K. (2019). Feature selection as monte-carlo search in growing single rooted directed acyclic graph by best leaf identification. In *Proceedings of the 2019 siam international conference on data mining* (pp. 450–458). SIAM. *Solutional conference on data mining* (pp. 450–458).

Trainings & Certifications

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Ongoing	Plane private pilot license (PPL) Aéroclub du Grésivaudan, Grenoble, France
2020	Innosuisse Entrepreneurship Program <i>Zurich, Switzerland</i> From Idea to Market, Business model development, Financial planning & Pitching.
2017	Scuba Diving - PADI Advanced Open water <i>Vancouver, Canada</i> Dry suit, Night dive, Cave dive, Deep dive (40m).
	AST1 – Avalanche Skills Training <i>Vancouver, Canada</i> Evaluating avalanche terrain, Avalanche rescue.
2015	CAF (Alpine French Club) Mountaineering Training. Grenoble, France Multipitch climbing, Roping up on glacier, Crevasse rescue.

References

Available on Request