

LUC Blassel

PhD Student, interested in Machine learning in Biology

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📍 Paris, France

Experience

- PhD Student**, Institut Pasteur, Paris, France 2020–Present
Using machine learning with sequence data. Funded by **PRAIRIE** and supervised by **Rayan Chikhi**.
Project page [here](#).
- Research Engineer**, Institut Pasteur, Paris, France 2018–2020
Using machine learning and large datasets to explore the drug resistance landscape in HIV. Supervised by **Olivier Gascuel**.
Project page [here](#).
- Data Scientist Intern**, CapitalData, Paris, France Mar–Sept 2017
Development of automated data validation and anomaly detection pipelines using R, Golang and Python.
- Teaching and tutoring**, Freelance, Paris, France 2015–Present
Tutoring in English, mathematics, biology, physics, chemistry and computer science. From middle school to university level.

Education

- Masters of Science (M.Sc.)**, Dep. MIDO, Dauphine université, France 2017–2018
IASD program, courses in Deep learning, reinforcement learning and other machine learning techniques.
- Diplôme d'Ingénieur**, AgroParisTech, Paris, France 2014–2018
Multi-disciplinary curriculum with courses in biology, statistics, and compute science. Last year specialization in machine learning, **IODAA** program
- BCPST Preparatory class**, École Saint-Hilaire, Paris, France 2012-2014
2 year French **preparatory class** to prepare a nationally ranked exam for entry in the "Grande Écoles"
ranked 201/1967 (Veto), ranked 481/2991 (Agro)

Languages

French: Native proficiency

English: Native proficiency

German: B1 level (1mo. program at Goethe Institute, Schwäbisch Hall, DE)

Mandarin Chinese: Intermediate level (5mo. program at SISU Shanghai CN, and 1mo. program at UIR, Beijing, CN)

Publications

- [1] Drug Resistance Mutations in HIV: New Bioinformatics Approaches and Challenges
Luc Blassel, Anna Zhukova, Christian J Villabona-Arenas, Katherine E Atkins, Stéphane Hué, Olivier Gascuel
Current Opinion in Virology 51 (Dec. 2021), pp. 56–64
DOI: [10.1016/j.coviro.2021.09.009](https://doi.org/10.1016/j.coviro.2021.09.009)
- [2] Using Machine Learning and Big Data to Explore the Drug Resistance Landscape in HIV
Luc Blassel, Anna Tostevin, Christian Julian Villabona-Arenas, Martine Peeters, Stéphane Hué, Olivier Gascuel
PLOS Computational Biology 17.8 (Aug. 2021), e1008873, Public Library of Science
DOI: [10.1371/journal.pcbi.1008873](https://doi.org/10.1371/journal.pcbi.1008873)
- [3] Origin, evolution and global spread of SARS-CoV-2
Anna Zhukova, Luc Blassel, Frédéric Lemoine, Marie Morel, Jakub Voznica, Olivier Gascuel
Comptes Rendus. Biologies (2020), Académie des sciences, Paris
DOI: [10.5802/crbiol.29](https://doi.org/10.5802/crbiol.29)
- [4] COVID-Align: Accurate online alignment of hCoV-19 genomes using a profile HMM
Frédéric Lemoine, Luc Blassel, Jakub Voznica, Olivier Gascuel
Bioinformatics (Oct. 2020)
DOI: [10.1093/bioinformatics/btaa871](https://doi.org/10.1093/bioinformatics/btaa871)