

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, self-employed, Paris, France 2015–Present

Tutoring in English, mathematics, biology, physics, chemistry and computer science. From middle school to university level. Weekly English oral examinations at the ENCPB since Sept. 2021.

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 (Agero)

Languages

French, English: Native proficiency

German: limited working proficiency (1mo. program at Goethe Institute, Schwäbisch Hall, DE)

Mandarin Chinese: Beginner 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. 1, 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. 26, 2021), e1008873, Public Library of Science
DOI: [10.1371/journal.pcbi.1008873](https://doi.org/10.1371/journal.pcbi.1008873)
- [3] COVID-Align: Accurate Online Alignment of hCoV-19 Genomes Using a Profile HMM
Frédéric Lemoine, Luc Blassel, Jakub Voznica, Olivier Gascuel
Bioinformatics (btaa871 Oct. 12, 2020)
DOI: [10.1093/bioinformatics/btaa871](https://doi.org/10.1093/bioinformatics/btaa871)
- [4] Origin, Evolution and Global Spread of SARS-CoV-2
Anna Zhukova, Luc Blassel, Frédéric Lemoine, Marie Morel, Jakub Voznica, Olivier Gascuel
Comptes Rendus. Biologies 344.1 (2021), pp. 57–75
DOI: [10.5802/crbio.29](https://doi.org/10.5802/crbio.29)