Loïc Lannelongue

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LinkedIn ➦

Education

2018 – (2021) **University of Cambridge**, *PhD*, United Kingdom.
The research project is focused on how to use machine learning to predict human protein interactions and better understand disease pathways.
Supervised by Prof. Michael Inouye
Recipient of the MRC-DTP Industrial Strategy Studentship in Artificial Intelligence
Cambridge Baker System Genomics Initiative
Cardiovascular Epidemiology Unit, Department of Public Health and Primary Care

2017 – 2018 **University of Oxford**, *MSc in Statistical Science (with Distinction)*, United Kingdom.
Main courses: statistics, statistical machine learning, mathematical genetics, computational statistics.
MSc thesis supervised by Prof. Mihaela van der Schaar "A Bayesian perspective on Trees of Predictors"
Department of Statistics

2016 – 2017 **ENSAE Paris**, *Diplôme d'ingénieur (MSc)*, France.
Statistics, Data Science, Econometrics, Economics.

2015 – 2016 **ENSAE Paris**, *BSc in Economics and Applied Mathematics*, France.
Statistics, Probability theory, Applied Mathematics, Economics.

2013 – 2015 **Lycée Saint-Louis, Paris**, *Classe préparatoire*, France.
Mathematics and theoretical Physics, Specialising in Mathematics and Computer Science

Work experience

June – Sept. 2017 **Data Analyst intern**, *Amazon EU*, Luxembourg.
The EU Placement team is in charge of overseeing and optimising the location of Amazon's stock in Europe. The projects involved data analysis and statistical modelling (R, Excel), Business Intelligence, Big Data technologies (Redshift, Oracle, ETL Manager).

June – Aug. 2016 **Data Scientist intern**, *Sidetrade*, France.
Creation of an algorithm which aims at identifying companies based on partial information such as names or addresses using text analysis and machine learning (python/scikit-learn), data mining (python/pandas, SQL) and a search engine (ElasticSearch).

Apr. 2016 – May 2017 **President**, *ENSAE Junior Études*, France.
The Junior-Enterprise of ENSAE is a student-run consultancy specialised in Data Science, Statistics and Quantitative Economics. Clients range from large corporations to start-ups, and the consultancy covers about 40 missions a year for a turnover of more than 110,000 €.
As president, my tasks were wide-ranging: to lay down and enforce the long-term strategy of the company, the management of the 16 people team and more than 50 consultants and lead the studies department.

Teaching experience

Supervision Supervision of over 75 undergraduate students at the University of Cambridge in the following courses: Foundations of Data Science (2nd year Computer Science), Bioinformatics (3rd year Computer Science) and Introduction to the Scientific Basis of Medicine (Epidemiology and Biostatistics for 1st year Medics) (2019-2020)

Supervision in Mathematics of second year undergraduate students from *Lycée Saint Louis* (Paris) preparing for the national exam. Topics covered included algebra, topology, probability theory, differential equations etc. (2015-2017).

Lecturing The *Tremplin* initiative: outreach program providing undergraduate-level scientific courses (in mathematics and physics) for disadvantaged Sixth form students, to encourage them to pursue scientific college degrees (2015-2016).

Tutoring Tutoring of High-school and Sixth form students in Scientific subjects (2015-2017)

Other projects

2016 **Optimisation of a student/teacher matching algorithm.**, *ENSAE & MyMentor.*
Analysis and optimisation of MyMentor's matching algorithm for students and private teachers.

2016 **Intelligent appointment scheduling software**, *ENSAE.*
Design of a software optimising the scheduling of appointments in Google Calendar, taking into account other appointments, travel times etc. This was coded with Python and Google's APIs.

Skills

Computer knowledge

Programming	Python
ML	scikit-learn, PyTorch, Keras/Tensorflow
Statistics	R, SAS, Stata
Web	HTML, CSS, Dash, Jekyll
Database	SQL, Redshift, ETL Manager
Applications	VBA, LaTeX, Office

Languages

English	Fluent
French	Native
German	Basics
Spanish	Basics

Publications

2020 **Triplex Doppler Ultrasonography to Describe the Uterine Arteries during Diestrus and Progesterone Profile in Pregnant and Non-Pregnant Bitches of Different Sizes.**, *J. Roos, C. Aubanel, Z. Niewiadomska, L. Lannelongue, C. Maenhoudt, and A. Fontbonne*, Theriogenology 141 (January): 153–60.

2019 **Gene Regulatory Networks to Explain Coronary Artery Disease Heritability.**, *M. Inouye, and L. Lannelongue*, Journal of the American College of Cardiology 73 (23): 2958–60.