

# LUCA ALBERGANTE, PH.D.

Data scientist / Bioinformatician

## Contact Details

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## Current Address

33 rue Rambuteau,  
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## Statistics / Machine Learning

A/B testing, (un)supervised clustering, feature selection, regression, sensitivity analysis, manifold learning, network analysis

## Modelling

Markov processes, UML, differential equations, agent-based modeling, Petri nets

## Programming

Parallel/distributed algorithm design, R, R/ggplot, R/shiny, C/C++, MATLAB, Java, Python 2

## Technologies

High performance computing, GitHub, Docker, SQL

## Languages

Italian (Excellent)  
English (Excellent)  
French (Intermediate)  
Spanish (Elementary)  
Japanese (Elementary)

## Hobbies

Reading, Language learning, yoga, visiting art museums, hiking

## More information

More information are available at  
<https://albergante.netlify.com>

## About me

I am a data scientist working on the development of statistical and machine learning algorithms to gain insights from complex multidimensional data, with a particular focus on biology. I have a background in Computer Science (B.Sc. and M.Sc.), applied Mathematics and Statistics (Ph.D.), and computational biology/bioinformatics.

I have been working in collaborative teams composed of engineers, physicists, biologists, mathematicians, and computer scientists to solve a variety of computational and statistical problems. I developed new computational methodologies and tools to investigate biological systems by analysing a variety of data (including expression data, networks, karyotypes, epidemiological data, and anatomical features). I have an extensive experience in programming, designing complex statistical pipelines, producing informative graphical visualizations, and building interactive interfaces to explore data.

## Experience

09/2016 – present	BIOINFORMATIC RESEARCH SCIENTIST, Institut Curie, Paris, France
06/2018 – 07/2018	VISITING RESEARCH SCIENTIST, Massachusetts general hospital, Boston, USA
10/2017 – 11/2017	VISITING RESEARCH SCIENTIST, Harvard medical school, Boston, USA
08/2011 – 08/2016	SYSTEMS BIOLOGY RESEARCH SCIENTIST, University of Dundee, Dundee, UK
03/2014 – 02/2016	LECTURER IN STATISTICS AND DATA ANALYSIS, University of Dundee, Dundee, UK
02/2014 – 06/2014	FREELANCE BOOK TRANSLATOR (Italian to English). Dundee, UK
11/2007 – 07/2011	LECTURER IN ALGORITHMS AND STATISTICS, University of Milan, Milan, Italy
09/2010 – 03/2011	FREELANCE WEB PROGRAMMER (PHP/MySQL architecture), Milan, Italy
11/2008 – 06/2009	VISITING RESEARCH SCHOLAR, University of York, York, UK
09/2007 – 08/2009	BACK OFFICE EMPLOYEE / ICT MANAGER, Servizi e consulenze doganali s.a.s, Novara, Italy
08/2001 – 09/2002	BACK OFFICE EMPLOYEE (mandatory civil service), Municipality of Novara, Novara, Italy

## Education

11/2006 – 12/2010	PH.D. IN APPLIED MATHEMATICS, with a focus on <i>biological data analysis</i> and <i>computational modelling</i> , Department of Mathematics, University of Milan, Milan, Italy
10/1997 – 10/2006	COMBINED B.SC. AND M.SC. IN COMPUTER SCIENCE (5 year program) with a focus on <i>Information theory</i> and <i>Algorithmics</i> . University of Milan, Milan, Italy. Graduated <i>magna cum laude</i> . During the course of my studies, I worked part-time and took two breaks to attend the mandatory Italian Civil Service (1 year) and the Cisco Systems Networking Academy (1 year).
10/2004 – 10/2005	CISCO SYSTEMS NETWORKING ACADEMY. University of Milan, Milan, Italy. I successfully passed the exam for all the 4 parts of the course.

## Publications / Oral presentations

I published 14 articles in international research journals (e.g., PNAS, NAR, PLoS Comp Bio) and international conferences, mostly as a leading author. My articles have been cited more than 100 times. I presented more than 20 scientific posters and gave more than 20 oral presentations in international conferences on bioinformatics, systems biology, machine learning, and computer science.

## Supervision / Teaching

I supervised several M.Sc. and Ph.D. students with projects focused on statistics, anatomy, computational biology and bioinformatics. I taught several courses at the University of Milan (in Italian), at the University of Dundee (in English), and at PSL Research University Paris (in English) on information theory, cryptography, algorithms, applied statistics, and bioinformatics.