ANTOINE BICHAT

Mathematical Engineer - PhD Student in biostatistics

✉ antoine.bichat@mines-nancy.org

🎓 EDUCATION

2020 | 2018

PhD
Enterome & LaMME   📍 Paris area, France
Discovering multi-scale metagenomic signatures through hierarchical organization of species. Tutored by Dr Christophe Ambroise, Dr Mahendra Mariadassou and Mr Jonathan Plassais

2017 | 2016

Mathematics of Modelling Master's degree
Sorbonne Université   📍 Paris, France
• Applied Mathematics for Biology and Medical Sciences
• Data Science

2017 | 2014

Graduate Engineering School
Mines Nancy   📍 Nancy, France
• Mathematical engineering
• Bioengineering

Classe Préparatoire aux Grandes Écoles
Lycée du Parc, MP*   📍 Lyon, France

💼 PROFESSIONAL EXPERIENCE

2017

Biostatistician intern
Nestlé Research Center   📍 Lausanne, Switzerland
• Data analysis of microbiome 16S sequencing
• Implementation of DADA2 pipeline for sample inference

2016

Biostatistician intern
Enterome   📍 Paris, France
• Data analysis of microbiome Illumina next-generation sequencing
• Writing and automation of bioinformatics quality control report

💻 TEACHING EXPERIENCE

2019

Data Science Starter Program
École Polytechnique, 21h, continuing education   📍 Paris area, France

2019 | 2018

An Introduction to the Linear Model
AgroParisTech, 40h, engineering students   📍 Paris, France

2017

Visualization with R
Mines Nancy, 3h, engineering students   📍 Nancy, France

INFO

🏠 Paris
🔗 abichat.github.io
in antoinebichat
🐦 @_abichat
⯎ @abichat
♨ 1993

LANGUAGES

🇫🇷 French (mother tongue)
🇺🇸 English (fluent - C1, IELTS)
🇮🇹 Italian (proficient - B2, CILS)
🇩🇪 German (beginner - B1, ZD)

TECHNICAL SKILLS

Highly skilled in R, tidyverse and visualization

Skilled in Python, Matlab, LaTeX and Office

Knowledge in C++, HTML and CSS

⚗ SCIENTIFIC PRODUCTIONS

2019

Incorporating phylogenetic information in microbiome abundance studies has no effect on detection power and FDR control
Article submited in *Frontiers in Microbiology*

Antoine Bichat, Jonathan Plassais, Christophe Ambroise and Mahendra Mariadassou

2019

Quantifying the impact of tree choice in metagenomics differential abundance studies with R
Poster for UseR! 2019   ♥ Toulouse, France

• Winner of Biostatistics poster prize

2019

Impact of tree choice in metagenomics differential abundance studies
Talk at SPMGD & JdS   ♥ Barcelona, Spain & Nancy, France

👥 VOLUNTEER WORK

2020
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2018

ℝ related activities
Involved in the R community   ♥ Paris, France

• Treasurer of *MolieR* (French association for the promotion of R)
• Active member of *State of the R* (AgroParisTech R users group)
• Organizing Committee for *SatRday Paris* 2019
• Organizing Committee for *Rencontres R* Paris 2020

2017
|
2014

During Engineering School
Mines Nancy   ♥ Nancy, France

• Academic year-group representative
• Student member of the Executive Board of Mines Nancy
• President of the debating and conference club
• Communication Officer for the recruitment forum of Mines Nancy

2014
|
2011

UDPS 69 (first aid association)
First aid worker, lifeguard   ♥ Lyon area, France