

ANTOINE BICHAT

Mathematical Engineer - PhD Student in Biostatistics

✉ antoine.bichat@mines-nancy.org

EDUCATION

- 2020**
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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**
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2016
● **Mathematics of Modelling Master's degree**
Sorbonne Université 📍 Paris, France
 - Applied Mathematics for Biology and Medical Sciences
 - Data Science
- 2017**
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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

- 2020**
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2019
● **Data Science Starter Program**
École Polytechnique, 21h, continuing education 📍 Paris area, France
- 2020**
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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

- 2020 ● **Incorporating phylogenetic information in microbiome abundance studies has no effect on detection power and FDR control**
Published 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 | 2018 ● **🔗 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 2020/21*
- 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