Matthieu Chaldebas, MSc

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EDUCATION

PhD Candidate, Bioinformatics

2022 - Present

Université Paris Cité, Paris, France

• Analysis of sequencing data to facilitate the identification of disease-causing non-coding variants.

Master of Science, Biotechnology Engineering

2016 - 2021

Sup' Biotech, Paris, France

• Bioinformatics, Biostatistics, Human Biology, Data Analysis, Machine Learning, Deep Learning.

Exchange Semester 4 Months – 2018

University of California, San Diego (UCSD), USA

• Molecular Basis of Human Diseases, Immunology.

EXPERIENCE

Bioinformatics Assistant 2021 – Present

The Rockefeller University, New York, USA

- Operate bioinformatics pipelines for variant calling and annotation from over 26,000 WES/WGS dataset.
- Conduct bulk and single-cell RNA-seq analyses, enhancing transcriptomic insights across various projects.
- Collaborate with a multidisciplinary team to design and implement custom analytical pipelines.

Data Scientist Intern 6 Months – 2021

BioMerieux, Lyon, France

- Optimized supervised machine learning models to increase predictive accuracy for antibiotic resistance.
- Enhanced cross-validation to account for phylogenetic factors, improving model generalization.
- Implemented algorithms for novelty detection in heterogeneous datasets.

Data Engineer Intern 4 Months – 2019

CEA, Paris Saclay, France

• Managed biological datasets, performed phylogenetic analysis, and created 3D protein models

LEADERSHIP

Student Board Representative

2018 - 2022

Sup'Biotech, Paris, France

• Represented the students in university decisions, facilitating communication between students and faculty.

Vice-President 2020 – 2021

Tech My Wine Club, Paris, France

• Led a team organizing wine tasting events, managing budget, logistics, and partnerships with local businesses.

SKILLS

Genomics/Transcriptomics: WES, WGS, bulk & scRNA-seq Analysis, Variant Calling, Annotation, Biostatistics Programming & Scripting: Python (Pandas, Scikit-learn, TensorFlow), R (Bioconductor, Tidyverse), Bash, Git Language: French (Native), English (Fluent, TOEIC 975/990)