

CHLOÉ SERRE-COMBE

PhD Student in Statistics · Extreme Value Theory, Geostatistics

Montpellier, France

✉ chloe.serre-combe@umontpellier.fr 🌐 chloesrcb.github.io 🗂 chloesrcb

EDUCATION

PhD in Statistics (ongoing)

University of Montpellier, France

2022 - 2026

Master in Statistics and Data Science, specialization in Biostatistics

University of Montpellier, France

2020 - 2022

3rd Year of Engineering School, specialization in Computer Science and Management

Polytech Montpellier, France

2019 - 2020

2nd Year of Bachelor in General Mathematics

Aix-Marseille University, France

2018 - 2019

1st Year of Bachelor in Mathematics and Computer Science

Aix-Marseille University, France

2017 - 2018

EXPERIENCE

Temporary Lecturer and Research Assistant (ATER) / PhD Student

IMAG, University of Montpellier and Inria LEMON team

2025 - 2026

Montpellier, France

PhD Student with teaching duties

IMAG, University of Montpellier and Inria LEMON team

2022 - 2025

Montpellier, France

- Thesis topic: Stochastic generators for extreme precipitation and flood risk assessment in urban areas at high spatio-temporal resolution
- Methods: Spatio-temporal processes, extreme value theory, dependence modeling
- Supervisors: Nicolas MEYER, Thomas OPITZ, Gwladys TOULEMONDE

Data Science Apprentice

KanopyMed

September 2021 - August 2022

Clapier, France

- Master thesis: Quantification and modeling of mortality related to air pollution in the Montpellier metropolitan area
- Methods: Spatial statistics, epidemiology
- Supervisors: Ulysse RODTS, Grégoire MERCIER

Intern

IMAG, University of Montpellier

July 2020 - August 2021

Montpellier, France

- Enhanced the RKeOps package, the R interface of KeOps, a software for 2D matrix reduction computations on GPUs
- Supervisors: Benjamin CHARLIER, Ghislain DURIF

Intern

Aix-Marseille University

June 2018 - July 2018

Aix-en-Provence, France

- Miller-Rabin primality test, understanding, oral presentation and report writing
- Supervisor: Julien KELLER

ORAL PRESENTATIONS

INTERNATIONAL

- July 2024** *Modeling moderate and extreme urban precipitation at high spatio-temporal resolution*
EVAN, Istituto Veneto di Scienze, Lettere ed Arti, Venice, Italy
- June 2024** *Modeling moderate and extreme urban precipitation at high spatio-temporal resolution*
IMSC, Météo France, Toulouse, France
- June 2023** *Modeling moderate and extreme urban precipitation at high spatio-temporal resolution*
EVA, Bocconi University, Milan, Italy

NATIONAL

- June 2025** *Spatio-temporal modeling of urban extreme rainfall events at high resolution*
Journées des Statistiques (JDS), Aix-Marseille University, Marseille, France
- January 2025** *Spatio-temporal modeling of urban extreme rainfall events at high resolution*
PhD Seminar, IMAG, University of Montpellier, France
- December 2024** *Modeling moderate and extreme urban precipitation at high spatio-temporal resolution*
Occimath Seminar, IMT, Toulouse, France
- May 2024** *Modeling moderate and extreme urban precipitation at high spatio-temporal resolution*
Journées des Statistiques (JDS), University of Bordeaux, France
- April 2024** *Modeling moderate and extreme urban precipitation at high spatio-temporal resolution*
Rencontres des Jeunes Statisticiens (RJS), Porquerolles, France
- September 2023** *Modeling urban precipitation at high spatio-temporal resolution*
MUFFINS Workshop, Aix-en-Provence, France
- July 2023** *Modeling urban precipitation at high spatio-temporal resolution*
Journées des Statistiques (JDS), University of Brussels, Belgium
- June 2023** *Towards statistical modeling of urban rainfall on a fine spatio-temporal scale*
RESSTE Day, FRUMAM, Marseille, France

SERVICE

Co-organizer of a working group on extreme value statistics
For PhD students, IMAG, University of Montpellier, France

2024-2026

Co-organizer of the PhD Seminar
IMAG, University of Montpellier, France

2023-2024

Outreach for female students in Maths C for L
CIRM, Marseille, France

February 2024

TEACHING

Computational Methods (21 h)
1st year of Bachelor in Biology, University of Montpellier, France

2025

Algebra and Analysis (53 h)
1st year of integrated preparatory cycle (PeiP), Polytech Montpellier, France

2025

Modeling and Statistics (101 h)
3rd year of Engineering School, specialization in Computer Science and Management, Polytech Montpellier, France

2022 - 2025

Probability, Modeling and Statistics (19 h)
3rd year of Engineering School, specialization in Software Development and IT Operations, Polytech Montpellier, France

2024

Multivariate Data Analysis (12 h)

2023

4th year of Engineering School, specialization in Computer Science and Management, Polytech Montpellier, France

Linear Algebra (27 h)

2023

1st year of Bachelor, Physics-Chemistry-Engineering track (PCSI), University of Montpellier, France

SKILLS

Programming Languages: R, Python, HTML/CSS, JavaScript, Bash

Development Tools: L^AT_EX, Git, VS Code

Operating Systems: Ubuntu, Windows

Languages: French (native), English (fluent), Italian (fluent)