

# Marwane Bourdim

MATHEMATICS MSc STUDENT, UNIVERSITÉ DE PARIS

---

EDUCATION	<b>Université de Paris</b> , Paris, France <i>2nd year of a Master's degree, Mathematics, Statistics and Machine Learning,</i> <i>2021-2022</i>
	<b>Sorbonne Université</b> , Paris, France <i>2nd year of a Master's degree, Mathematical Modeling applied to biology &amp; medicine, 2020-2021</i>
	<b>Université de Paris</b> , Paris, France <i>1st year of a Master's degree, Applied Mathematics,</i> <i>2019-2020</i>
	<b>Université de Paris</b> , Paris, France <i>Bachelor of Science, Pure Mathematics,</i> <i>2018-2019</i>
	<b>Lycée Jacques Decour</b> , Paris, France <i>Classes Préparatoirese, Mathematics and Physics,</i> <i>2016-2018</i>

---

RESEARCH INTERESTS	Stochastic processes, Scientific computing, Systems biology, Protein design Drug discovery, Optimal transport, Geometric Deep Learning, Artificial Intelligence
--------------------	--

---

RESEARCH PROJECTS	<b>Mathematical and computational modeling of the Covid-19 pandemic in France with a spatio-temporal stochastic framework,</b> <i>Supervisors : Prof. Dirk Drasdo and Postdoc. Jules Dichamp</i> <i>April '21 - September '21</i> <ul style="list-style-type: none"><li>- Studied the influence of stochasticity and the configuration of the spatial graph on the epidemic dynamic, making use of Markov Processes, Master equations and the Gillespie algorithm.</li><li>- Implementing a human mobility model in Python.</li><li>- Co-wrote a forthcoming scientific article.</li></ul>
-------------------	---

---

COMPUTER SKILLS	<b>Languages:</b> C++, Python, R, $\text{\LaTeX}$ <b>Packages and libraries:</b> Pytorch, Pandas, TensorFlow
-----------------	---

---

LANGUAGES SPOKEN	French (native), English (fluent), Spanish (conversational), German (can read).
------------------	---

---

EXTRA INTERESTS	Philosophy of science, Economics, drawing, Art History...
-----------------	---