

JEAN MERCAT

AI Research Scientist

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EXPERIENCE

Ph.D. Road Scene Motion Forecasting

Renault & Paris Saclay University

📅 Sep 2017 - Mar 2021 📍 Paris

- Road scene **data analysis** and pre-processing
- **Neural networks** for time series (RNN, CNN, VAE, Attention)
- Research and applications

🏆 **First place** [Argoverse Motion Forecasting Competition](#)

Won twice: [NeurIPS 2019](#) and [CVPR 2020](#)

📖 **Publications** [ArXiv](#), [IQPC 2019](#), [NeurIPS 2019](#), [ICRA 2020](#)

Data Engineer

Inria

📅 2017 (9 months) 📍 Bordeaux

- **C++/PostgreSQL** interface OOP
- **Medical data** processing (DICOM)
- Interdisciplinarity between **computer science** and **medicine**

Research Engineer

Bordeaux University

📅 2016 (12 months) 📍 Bordeaux

- **Image processing** in C++, Qt, Cimg
- Anisotropic annealing **simulation**
- Interdisciplinarity between **computer science** and **chemistry**

📖 **Teaching** 22h Fortran tutorial at ENSEIRB-MatMeca

📖 **Publication** [Macromolecular rapid communications](#)

Research Intern

M2P2

📅 2015 (6 months) 📍 Marseilles

- MPI Fortran HPC
- Lattice Boltzman **simulation**, two-phase fluid and solid interaction
- Interdisciplinarity between **computer science**, **physics** and **biology**

📖 **Publications** [APS 2015](#), [ICTAM 2016](#)

STUDIES

Engineer's Degree in Scientific Computing

EINSEIRB-MatMeca Bordeaux INP

📅 2012 - 2015 📍 Bordeaux, France

High School Year Abroad

F.J. Turner High School

📅 2008 - 2009 📍 Beloit, WI, USA

SKILLS

Machine Learning Neural Networks
Scientific Computing Research \LaTeX
git Teamwork Interdisciplinarity

LANGUAGES

French ●●●●●●
English (975 TOEIC) ●●●●●●

Fortran90, Open MPI ●●●●●●
Python, Pytorch, Tensorflow ●●●●●●
C/C++ ●●●●●●

ONLINE EXPERIENCE

Machine Learning

📅 Dec 2018 ∞ [Coursera](#)

Neural Networks for Machine Learning

📅 Mar 2018 ∞ [Coursera](#)

Learning How to Learn

📅 Dec 2018 ∞ [Coursera](#)



GitHub

Pytorch [Vanilla Forecast](#), Pytorch
[Kalman](#), C MMG, C++ LBM

REFERENCES

Concerning my Ph.D.:

Guillermo Pita Gil, Nicole El Zoghby, Guillaume Sandou, Dominique Beauvois

@ {Guillermo.Pita-Gil, Nicole.El-Zoghby}@renault.com, {Guillaume.Sandou, Dominique.Beauvois}@centralesupelec.fr

Concerning the Engineer's jobs: Thierry Colin

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Concerning the Internship: Julien Favier

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HOBBIES

Improv Philosophy Audio books
Rock climbing Science DIY Outdoors