Othmane MARFOQ

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Experiences/Trainee-ships

Inria   **Sophia-Antipolis, France**
R&D Engineer   *November-July 2020*
- Design new distributed learning algorithms with a particular focus on communication constraints, and study analytically their performance and guarantees;
- Implement distributed machine learning algorithms using libraries like PyTorch;

Smiths Detection   **Vitry-sur-Seine, France**
End-of-studies internship   *Avril-Août 2019*
- Artificial intelligence based X-ray image retrieval;
- Cargo X-ray Images captioning using deep learning techniques;

Lixoft   **Antony, France**
Research Internship   *Mai-Août 2018*
- Implementation of numerical strategies for statistical pharmaceutical models comparison and selection;
- Survival data study: construction and implementation of non-parametric survival function estimator for interval censored data;

Formation et Diplômes

Msc MVA: Mathematics, Computer Vision, Machine Learning   **Cachan, France**
ENS Paris-Saclay   *2018–2019*
Courses:
- Object recognition and computer vision.
- Algorithms for speech and natural language processing.
- Probabilistic graphical models.
- Foundations of Distributed and Large Scale Computing Optimization.
- Reinforcement learning.
- Advanced learning for text and graph data.
- Kernel Methods for machine learning.

Master in applied mathematics   **Palaiseau, France**
ENSTA ParisTech   *2016–2019*
Courses:
- Non-differentiable optimization and proximal methods.
- Operational research and big data.
- Complexity theory.
- Differentiable optimization.
- Numerical probabilistic and statistical methods.
- Automatic identification and movement planning.
- Finite element method and functional analysis.
- Optimal Control.

CPGE Ibn-Abdoun   **Khouribga, Maroc**
Lycée Ibn-Abdoun   *2014–2016*
Advanced courses in mathematics, physics and computer science, to pass the highly competitive examinations, leading to the most prestigious universities of Science and Engineering in France

Skills and languages

- **Programming languages**: Python, C/C++, R
- **Languages**: French (Bilingual), Arabic (Native), English (TOEIC: 915)
- **Databases**: MySQL, MongoDB.
- **Skills**: Machine Learning, Federated Learning, Distributed Optimisation, Deep Learning, Computer Vision.

Achievement and distinctions

- Among the best 10% of first and second year students of ENSTA Paris
- Moroccan Merit Scholarship (2016-2019)