

# Antoine Cordier

contactantoine@icloud.com | (+33) 6 49 43 37 26

[linkedin](#) | [github](#)

## EDUCATION

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SEP.16 - AUG.17	MSc. IN APPLIED BIOSCIENCES AND BIOTECHNOLOGY, <b>Imperial College</b> , London, UK <b>Main coursework includes:</b> <i>Bioinformatics, Genes and Genomics.</i>
AVR.14 - MAR.16	INGÉNIEUR POLYTECHNICIEN PROGRAM, <b>École polytechnique</b> , Paris MSc. IN SCIENCE AND ENGINEERING One of France's top universities for science and engineering. <b>Main coursework includes:</b> <i>Statistical Learning, Markov's Chains, Econometry, Neurobiology, Analog and Digital Microelectronics Devices, Quantum Mechanics, Philosophy.</i>   <b>GPA:</b> 3.82/4.
SEP.11 - JUN.13	PREPARATORY PROGRAM, <b>Lycée Sainte-Geneviève</b> , Versailles Intensive coursework in advanced Maths, Physics, and Chemistry (PCSI-PC*) leading to national-wide competitive entrance examinations to the French <i>Grandes Ecoles.</i>   <b>GPA:</b> 3.96/4.

## EXPERIENCE

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JUN.18 - PRES.	Machine Learning Research Engineer, <b>Scortex</b> , Paris <ul style="list-style-type: none"><li>• Successfully designed and implemented products deployed in factories by Scortex.</li><li>• Research topics include supervised deep learning on images (classification, segmentation, object detection), active and weakly supervised learning, anomaly detection, synthetic-to-real domain transfer.</li><li>• Co-authored multiple papers, as well as blog posts on batch normalization folding, robustness of neural networks to perturbations, selective back-propagation, and on the <a href="#">tf.data tensorflow API</a>.</li><li>• Helped in developing the Scortex Machine Learning platform and libraries (data generation and processing, networks training, evaluation metrics) in Python.</li><li>• Managed research interns.</li></ul>
MAR.16 - AUG.16	Visiting Researcher, <b>Brain and Spine Institute</b> , Paris Role of glymphatic system in neuro-immune responses to neurodegeneration in Parkinson's disease.
MAY.15 - SEP.15	Operations Intern, <b>Jumia Travel</b> , Dakar, Senegal <ul style="list-style-type: none"><li>• Managed dedicated projects in order to help improve operations of Jumia Travel for West Africa.</li><li>• Met hotel managers on the field to solve misunderstandings.</li></ul>
OCT.13 - MAR.14	Intern, <b>French Air Force (ET60)</b> , Villacoublay <ul style="list-style-type: none"><li>• Working for the transport squadron responsible for the transport of heads of Government of France.</li><li>• Improved the mission-planning standards (digitizing and automating), teaming up with pilots.</li></ul>

## SKILLS

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PROGRAMMING LANGUAGES: Python, JavaScript, PHP, Java.

PYTHON LIBRARIES: numpy, scikit-learn, tensorflow, keras, opencv, matplotlib, pandas.

IT: Unix, GitHub, Docker, Azure, MongoDB, Latex, Excel, Photoshop, Illustrator.

LANGUAGES: French (native), English (fluent - TOEFL iBT: 110/120), Spanish (intermediate).

## PUBLICATIONS

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2022	Data refinement for fully unsupervised visual inspection using pre-trained networks <a href="#">[aX]</a>
2021	Data augmentation and pre-trained networks for extremely low data regimes unsupervised visual inspection <a href="#">[aX]</a> SPIE Optical Metrology 2021
2021	Synthetic training data generation for deep learning based quality inspection <a href="#">[aX]</a> QCAV 2021
2021	Active learning using weakly supervised signals for quality inspection <a href="#">[aX]</a> QCAV 2021

## CERTIFICATES

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2020	Google Foo Bar code challenge finisher <a href="#">[github]</a>
2018	Deep Learning (Andrew Ng) <a href="#">[certificate]</a>
2017	Machine Learning (Andrew Ng)

## INTERESTS

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Electronic music: composing and touring in Europe since 2017.

Rock-climbing: 7 years of practice.

Keen interest in philosophy and crypto-currencies.