

# Gabriel HURTADO

AI Research Engineer

PHONE: +33 659 211 322

EMAIL: [gabriel.j.hurtado@gmail.com](mailto:gabriel.j.hurtado@gmail.com)

## WORK EXPERIENCE

JUNE 2019 -	<b>AI Research Engineer HUAWEI</b> Paris, France Working with top Machine Learning scientists on highly complex topics, mainly related to Reinforcement Learning. Developed generative algorithms in Python for an open-source framework with very promising results ( <a href="#">RAMP</a> ). Multiple papers submitted at top conferences based on this project, one already accepted at <a href="#">ICLR</a> .
JUNE-NOV 2018	<b>Machine Learning Internship NOKIA</b> Paris, France Analyzed and applied the potential of deep learning in the telecommunication sector. Used Natural Language Processing techniques paired with LSTMs, Fasttext and Variational Autoencoders with Tensorflow and Keras. Improved the reliability of the studied system through early failure detection and prediction, enabling to save millions of \$.
SUMMER 2017	<b>Summer Research Internship SIEMENS</b> Princeton, New Jersey Developed a probabilistic inference tool in C and Python. Sped up the inference process by a factor of two by adapting and tailoring a custom statistics library, for an embedded device.
SEP-FEB 2016-17	<b>Research Internship SIEMENS</b> Princeton, New Jersey Joined a research team focusing on machine learning topics, investigated SVM and Dynamic Bayesian Networks under the supervision of Dr. Rosca. Improved the accuracy by 35%.

## EDUCATION

2018 - 2019	<b>Masters in COMPUTER SCIENCE, Georgia Institute of Technology, USA</b> Degree focused on Machine Learning and Deep Learning. GPA of 3.8/4
2015 - 2018	<b>Engineering degree in COMPUTER SCIENCE, University of Technology of Compiègne, France</b> Specialization in Data Science and Machine Learning. GPA of 3.9/4
FALL 2017	<b>Exchange Semester at Polytechnique Montréal, Canada</b> Six months studying abroad in Computer Science, focus in Artificial Intelligence.

## PROJECTS

### MODEL-BASED MICRO-DATA REINFORCEMENT LEARNING

Wrote a paper on generative model applied to reinforcement learning, achieve SOTA on sample complexity on [acrobot](#). Studied generative models and their properties. Accepted in a [RL workshop at NeurIPS](#) and at [ICLR](#).

### DEEP LEARNING FOR STYLE TRANSFER

Applied Adaptive Instance Normalization for artificial aging of aerial views in PyTorch, Caffe and Tensorflow.

This Neural Style Transfer project was acknowledged in a [paper](#) by A. Benbihi at the International Conference on P.A.

### DEEP LEARNING FOR SENTIMENT ANALYSIS

Led a team of four students in a project involving standard machine learning techniques along with LSTM networks, in Keras and Tensorflow. The model predicts scores of users' comments with an average error of 0.4 out of 5 stars.

### TAXI PREDICTION FOR PORTO

Created a project aiming to understand trends in taxi trips in the city of Porto. Using Python and Cassandra, predicted the most common rides and generated advice for taxi drivers using unsupervised learning.

## LANGUAGES

FRENCH: Mother tongue

ENGLISH: Fluent

SPANISH: Fluent

ITALIAN: Advanced

## COMPUTER SKILLS

Advanced knowledge: PYTHON, NUMPY, PYTORCH, KERAS, C, C++, JAVA, SQL, NoSQL, MATLAB, R

Knowledge of: UNIX, TENSORFLOW, DOCKER, KUBERNETES, YAML, PROLOG, ~~TEX~~

## INTERESTS AND ACTIVITIES

Machine Learning (founder member of DataVenture, a student association promoting AI)  
Science, History, Technology, Travelling and Photography