# JEROME KAFROUNI

New York, NY | (929) 216–1537
j.kafrouni@gmail.com | github: @jkafrouni
Authorized to work in the US

## EDUCATION

**Columbia University**                                                                                                    New York, NY
*M.S. in Computer Science, Machine Learning Track, GPA: 3.92*                              exp. Dec 2018
Relevant courses: Machine Learning, Advanced Database Systems, Machine Learning Products, Cryptography
NLP, Deep Learning, Applied Data Science, Applied Machine Learning

Course Assistant in Introduction to Databases – Course Assistant Fellow in Deep Learning
Awarded for Excellence in Teaching and Service by the Computer Science department

**Ecole polytechnique**                                                                                                        Paris, FR
*M.S. in Computer Science and Entrepreneurship*                                                       Jun 2017
Relevant courses: Machine Learning, Regression, Intro to Databases, Case Studies, Startup Creation, Design Thinking

*B.S in Computer Science, Applied Mathematics, Economics*                                       Aug 2016
Relevant courses: Algorithms Design, Concurrent Computing, Massive Data Processing, Advanced Programming,
Numerical Approximation and Optimization, Random Events Modeling

## EXPERIENCE

**IBM**                                                                                                                            Austin, TX
*Machine Learning Engineer Intern - Extreme Blue program*                           May 2018 – Aug 2018
- Automated core Chip Design processes by training Supervised Machine Learning models using Scikit-learn
- Increased tools speed by 40x by writing and improving data pipelines using Python, Neo4j and MariaDB
- Presented weekly to IBM executives, applied IBM Design Thinking, in an Agile team

**Destygo**                                                                                                                    Paris, FR
*Back End Developer Intern*                                                                              Apr 2017 – Aug 2017
- Rewrote the code of a chatbot to use Multiprocessing efficiently, in Python
- Increased the rate of messages treated by 4x with constant memory use
- Developed a testing interface for the chatbot, in Python, using Flask, SQLAlchemy, Postgres

**ClassWallet**                                                                                                            Miami, FL
*Full Stack Developer Intern*                                                                            Jun 2016 – Aug 2016
- Performed Web Scraping over a catalog of 100K+ school supply products, using mainly Node.js
- Exported and analyzed the database of products using MongoDB

**French Air Force**                                                                                                    Evreux, FR
*Flight Activity Supervisor Officer*                                                                  Sep 2014 – Mar 2015
- Developed leadership skills and team spirit in a new and challenging environment
- Trained a recruit of the military reserve force

## RECENT PROJECTS

- Reinforcement Learning project for video game playing (Starcraft II)                  Python, Tensorflow
- Collaborative Filtering algorithms to predict movie ratings and web user visits                           R
- Image classification with traditional feature extraction vs CNNs                         R, OpenCV, Keras
- Won in-class Kaggle challenge on CIFAR10 image classification dataset                  Python, Tensorflow
- Text mining project on "Spooky Literature" Kaggle Dataset                                                  R
- Association rules extraction on a large NYC public dataset                                            Python
- Information Extraction system on web search results                                 Python, Stanford CoreNLP
- Information Retrieval system based on Rocchio's Relevance Feedback                                    Python

## TECHNICAL SKILLS

**Programming:** Advanced in Python, R, Scikit-learn, Pandas, PostgreSQL, MariaDB, Keras.
Intermediate in Tensorflow, Flask, GRPC, Neo4J, Javascript, SQLAlchemy.
Beginner in C++, Java, OCaml, jQuery, React.js, Node.js, MongoDB.
**Other tools:** Github, DataGrip, basics of Google Cloud Services, Adobe Photoshop, Sublime Text