

# Arthur Douillard

DEEP LEARNING ENGINEER IN COMPUTER VISION

Paris, France

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## Education

### M.S. in Computer Science (*Diplôme d'ingénieur*)

Paris, France

EPITA *Advisor: Reda Dehak*

2013 - 2018

- Machine Learning, Deep Learning, NLP, Python, C++, Golang, Scala/Kafka/Spark, Image processing, Text Mining
- Stats & Proba, Linear Algebra, Convex Optimization, Logic

## Experience

### Dataiku

Paris, France

RESEARCH ENGINEER INTERN *Advisor: Léo Dreyfus-Schmidt*

Feb - Aug 2018

- Implemented deep learning models for computer vision (transfer learning, detection, training schedule, etc.).
- Created a GPU monitoring webapp sold to a Fortune 100 company.
- Won the NATO Innovation Challenge as the lead scientist of my team.
- Organized & presented internal conferences on deep learning.

### ZebraIA

Paris, France

GRADUATE STUDENT RESEARCHER *Advisor: Guillaume Palacios*

Aug 2017 - Jan 2018

- Researched & Implemented SotA NLP papers for a medical chatbot.

### EPITA

Paris, France

TEACHER ASSISTANT (YAKA / ACU)

Jan 2017 - Jan 2018

- Taught C, C++, Shell, SQL, Java, and algorithmic concepts to 2 classes of 350 Third Year students.

### MyDrive Solutions

London, United Kingdom

DATA SCIENTIST INTERN *Advisor: Zoulficar S. Younes*

Sept 2016 - Jan 2017

- Analyzed and applied Machine Learning algorithms on driver data in Python (Pandas, Scikit-Learn, Keras) and R

## Personal Projects

- **Implementation in Keras/TF** of Snapshot Ensemble, FreezeOut, EffNet, FashionNet, and Squeeze-Excite-Net.
- **Implementation in Pytorch** of VQA and Variational Autoencoders.
- **Kafka pipeline** in Scala/Python with multi-threaded web-scraper, **sentiment analysis** and processing with Spark-Streaming.
- Memory allocator on a **cluster of machines using MPI**.
- Minor contribution to scikit-learn fixing a bug in the RFECV algorithm.
- Efficient implementation of Damerau-Levenshtein distance with **Radix Trie** in C++.
- A small **search engine in Golang**, with indexation & search done through a custom pool of Goroutines.
- **Compiler front-end/back-end** for the language Tiger, coded in C++, YACC, Bison, and several flavors of ASM.

## Skills

- **Programming Languages:** Python C/C++ SQL Java Scala Golang R Shell Latex
- **Data Science:** Keras Tensorflow Scikit-Learn Numpy Pandas PyTorch
- **Tools & OS:** Linux MacOS Git Jupyter Vim VSCode
- **Languages:** French (native) English (TOEIC 965/990) Spanish Esperanto & Korean (notions)