Arthur Douillard

Deep Learning Engineer in Computer Vision

Paris, France

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Education

PhD student in Deep Learning for Computer Vision — *Paris, France*

Sorbonne University (LIP6) *Advisor: Pr. Matthieu Cord* — *2019 - Now*

- Working on incremental learning.

M.S. in Computer Science (*Diplôme d'ingénieur*) Major GPA: 3.7 — *Paris, France*

EPITA *Advisor: Pr. 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

Heuritech — *Paris, France*

Research Scientist *Advisor: Charles Ollion* — *July 2019 - Now*

- Working part-time to improve Heuritech's Deep Learning pipeline.

Heuritech — *Paris, France*

Research Engineer *Advisor: Alexandre Ramé* — *Sept 2018 - June 2019*

- Researching & implementing Deep Learning papers & improving the Computer Vision pipeline of Heuritech.

Dataiku — *Paris, France*

Research Engineer Intern *Advisor: Léo Dreyfus-Schmidt* — *Feb - Aug 2018*

- Implemented deep learning models for computer vision (transfer learning, detection, training schedules, etc.).
- Won the NATO Innovation Challenge as the lead scientist of my team with a RetinaNet on satellite imagery.
- Organized & presented internal conferences on deep learning.

ZebrIA — *Paris, France*

Graduate Student Researcher *Advisor: Guillaume Palacios* — *Aug 2017 - Jan 2018*

- Researched & Implemented Deep Learning NLP papers for a medical chatbot.

EPITA — *Paris, France*

Teacher Assistant (*YAKA* / *ACU*) — *Jan 2017 - Dec 2018*

- Taught C, C++, Shell, SQL, Java, and algorithmic concepts to 2 classes of 350 Third Year students.
- Taught Deep Learning for Computer Vision for Fifth 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 or Pytorch** of Snapshot Ensemble, FreezeOut, EffNet, FashionNet, Squeeze-Excite-Net, VQA models, VAE, NALU, Siamese & Triplet networks, MADA, etc.
- **Blog** where I explain Deep Learning concepts (link)
- 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++.
- **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**: Pytorch Keras Tensorflow Scikit-Learn Numpy Pandas
- **Tools & OS**: Linux MacOs Git Jupyter Vim VSCode
- **Languages**: French (native) English (TOEIC 965/990) Spanish Esperanto & Korean (notions)