



# DEKHTIAR Jonathan

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Objective : Research Engineer in Computer Vision, Data Science, Machine and Deep Learning applications.

## ACADEMIC

### PHD IN DEEP LEARNING AND COMPUTER VISION

UNIVERSITY OF TECHNOLOGY OF COMPIEGNE

Oct. 2015 – Expected End: Sep. 2019 | Compiègne, France

### COMPUTER SCIENCE AND DATA SCIENCE ENGINEER

UNIVERSITY OF TECHNOLOGY OF COMPIEGNE

September 2010 – July 2015 | Compiègne, France

### ERASMUS IN COMPUTER SCIENCE, DATA MINING

TECHNISCHE UNIVERSITÄT HAMBURG-HARBURG

April 2014 – July 2014 | Hamburg, Germany

### ERASMUS IN COMPUTER SCIENCE, ALGORITHMIC

TECHNISCHE UNIVERSITÄT WIEN

February 2012 – June 2012 | Vienna, Austria

## EXPERIENCES

### NVIDIA | DEEP LEARNING SOFTWARE ENGINEER

October 2018 – Present | Tel Aviv, Israel

- Performance analysis and optimization of various computer vision deep learning models implemented with Tensorflow.
- Low-level optimizations for sparse tensors computations. Proof-of-concept designs: sparse gradient, sparse communication for multi-GPUs training, sparse recommender systems, model compression and edge computing.

### UTC | PHD IN DEEP LEARNING AND COMPUTER VISION

October 2015 – September 2018 | Compiègne, France

- Study on Convolutional Networks using Tensorflow and Caffe. Goal: classify and segment industrial mechanical parts and assemblies.
- Study on Adversarial Auto-Encoder and Generative Networks, and aiming to detect manufacturing defects (e.g impacts and scratches) on manufactured products on the production line.

### DELTACAD | C++/PYTHON DEVELOPER & DATA ANALYST

February 2015 – July 2015 | Lacroix Saint-Ouen, France

- Application development in C++ to perform mechanical parts recognition using OpenCV (C++) and Scikit-learn (Python).
- Benchmark (speed and accuracy) of different supervised learning models (KNN, SVM, Decision Trees, ...).
- Web API Development with Django on the AWS Cloud (Amazon).

## PUBLICATIONS

J. Dekhtiar, A. Durupt, M. Bricogne, B. Eynard, H. Rowson, and D. Kiritsis. Deep learning for big data applications in CAD and PLM – research review, opportunities and case study. *Computers in Industry*, 100:227 – 243, 2018. doi: <https://doi.org/10.1016/j.compind.2018.04.005>.

## ACTIVITIES & LEISURE TIME

2017	Aviation	Private Pilot in General Aviation
2017	Data Venture	Machine and Deep Learning Instructor

## ADDITIONAL COURSES

- Stanford CS224d MooC: Deep Learning for Natural Language Processing
- Stanford CS231n MooC: Convolutional Neural Networks for Visual Recognition

## PERSONAL PROJECTS

- Curation Platform and scientific watch with recommender system: [feedcrunch.io](https://feedcrunch.io)
- **Technical Blog**: Posts and Workshops about Machine Learning: [born2data.com](https://born2data.com)
- **TensorLayer**: Core Team Member. TensorLayer offer a high-level API for Tensorflow targeting researchers & engineers: [github.com/tensorlayer/tensorlayer](https://github.com/tensorlayer/tensorlayer) (4.7k ★)

## COMPETENCES

### PROGRAMMING

- Python • C++ • Tensorflow • Scikit-Learn
- TensorLayer • Docker • PyTorch • OpenCV

### Familiar with:

- Django • R • Unsupervised Learning

### LANGUAGES

- **English** : Fluent (Written / Read / Spoken)
- **TOEIC** : 975/990 (obtained in 2014)
- **German** : Correct (Written / Read / Spoken)
- **French** : Native Speaker

## LINKS

- Website: [JonathanDekhtiar.eu](http://JonathanDekhtiar.eu)
- Github: [DEKHTIARJonathan](https://github.com/DEKHTIARJonathan)
- LinkedIn: [Jonathan DEKHTIAR](https://www.linkedin.com/in/JonathanDEKHTIAR)
- Twitter: [@Born2Data](https://twitter.com/Born2Data)
- Technical Blog: [born2data.com](https://born2data.com)
- ResearchGate: [Jonathan DEKHTIAR](https://www.researchgate.net/profile/Jonathan-DEKHTIAR)
- Google Scholar: [Jonathan DEKHTIAR](https://scholar.google.com/citations?user=JonathanDEKHTIAR)
- RSS Feed: [feedcrunch.io/@dataradar](https://feedcrunch.io/@dataradar)
- Photography: [ruskistudio.com](https://ruskistudio.com)