Minh Tri LÊ

Industrial Ph.D. Student in Deep Learning

leminhtr.github.io

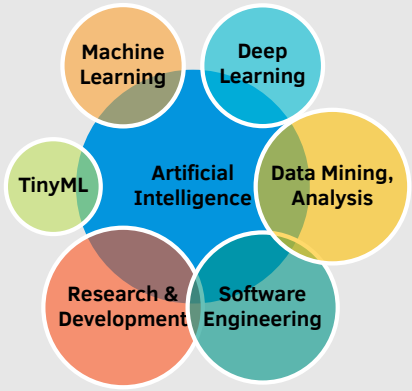
/in/MinhTri-Le

/leminhtr

+ (33) 6 43 84 87 17

trileminh16 [at] gmail.com

Skills Summary



Computer Languages

Python, TF/PyTorch, Scikit-learn, Numpy

C/C++, SQL3, Matlab, JS/TS, HTML/CSS

Bash

Software and Tools

Git, DBMS, REST API

Linux, Lightroom, Premiere Pro/AE

Elasticsearch, Kibana, Gephi

Languages

French, English, Italian, Spanish, Vietnamese, Polish, Mandarin

Work Experience

Jun 2020 - Jun 2023 — **Industrial Ph.D. in Deep Learning** — ***TDK - InvenSense*** & Inria, Grenoble

Deep Learning applied to signal processing for ultra-low-power MCUs and sensor applications. *CIFRE Ph.D.*

- Accepted poster on 1-bit quantization at *TinyML EMEA 2022*
- Lê, Minh Tri 2022. *Methods for Improved Keyword Spotting*. U.S. patent application, filed February 23, 2022. Patent pending
- Lê, Minh Tri 2022. *1 bit quantization for embedded systems*. U.S. patent application. Patent filing under review.

Keywords: Neural Networks, TinyML, Model Compression, AutoML, Edge Inference, Micro-embedded Systems, Sensors, ...

Feb - Aug 2019 — **Research Engineer Intern in Deep Learning** — ***TDK - InvenSense***, Grenoble

Deep Learning applied to micro-controllers (MEMS sensors). *Reference:* ***here***

- Outperformed current classic algorithms in accuracy, power consumption & efficiency of the design cycle for fingerprints application

Sep 2017 - Feb 2018 — **Web Developer Intern** — ***Metadot Corporation***, Austin, TX

Development of a *Cloud connected Keyboard Application* *Reference:* ***here***

- Improved real-time communication latency with socket connection to receive signals from the cloud to the application in ≈30ms
- Deployed and suggested new features: Dashboards for socket connections and task scheduler (w/ Angular 5)

Education

2020 - 2023 **Ph.D. - Deep Learning** — ***Université Grenoble Alpes***, Grenoble

Deep learning for micro-embedded systems. Industrial Ph.D, supervised by *Etienne de Foras*, Sr. software engineer *@TDK InvenSense* & *Julyan Arbel*, researcher *@Inria Grenoble*

2013 - 2019 **M.Sc. - Computer Science & Eng.** — ***Université de Technologie de Compiègne***, Compiègne

Specialization: ***Decision and Data Mining***

•Data Analysis & Data Mining •Data Warehouse & Decision Support *•Lab Projects* •Linear/Nonlinear Optimization

2018 - 2019 **M.Sc. - Computer Science** — ***Scuola Politecnica di Genova***, Genoa

Master: ***Laurea Magistrale in Ingegneria Informatica***

- Double European Master degree (*EMECIS*): *European Master in Engineering for Complex and Interacting Systems (Erasmus exchange)*

2018 - 2019 **M.Sc. - Complex System Engineering** — ***UT - Compiègne***, Compiègne

Specialization: ***Machine Learning & Optimization***

- Double European Master degree (*EMECIS*), in parallel with my final year at the UTC. *Labex MS2T program*

Research Projects

Feb - Jun 2018 — **Predicting *English level* (A1, B2,...) from texts**

- Experimented various machine learning algorithms w/ Scikit-Learn, Keras
- Predicted fluency with 83% accuracy from given quantitative features extracted from raw text (200k training/testing samples)

Feb - Jun 2017 — **Data analysis of educational content for *Faq2sciences.fr***

- Designed a learning dashboard for professors and students from educational data to help identify student's difficulties with *Kelis* team, for an integration to *Faq2sciences website*. *Jury's review:* ***Here*** *(FR)* |
- Selected and analyzed data (test results, answering time) to understand student progress/behavior (≈75k samples) w/ Elastic Stack and Plotly

Miscellaneous

Association — *Data Venture*: Active member for related data science projects
Erasmus Student Network: Organized events for international students