

Théo Gigant

Deep Learning Engineer

Paris, France
✉ contact@theogigant.fr
📄 [gigantttheo.github.io](https://github.com/gigantttheo)
HuggingFace: [gigant](#)

Education

- 2022–2025
- Université Paris-Saclay - ED STIC,**
L2S - Centrale Supélec, PhD (CIFRE).
Representation of encoded features for extractive and abstractive summarization of multimodal content in French language
- 2018–2021
- Institut Polytechnique de Paris - Télécom SudParis,**
Statistical Modeling, Master of Science.
Applied Mathematics, Deep Learning

Experience

- Jan 2022–Ongoing
- Machine Learning Engineer**, FREELANCE, PARIS.
 - Implementing computer vision models for real world applications, teaching deep learning & writing comprehensive blog posts on Deep Learning topics **[BLOG]**.
 - People count application model deployment on NVIDIA's Jetson Nano
- Jul 2021–Dec 2021
- Computer Vision Research Intern**, HUAWEI R&D CENTER, HELSINKI.
Part of the Research & Development Computer Vision unit
 - Developing and training deep learning models for Computer Vision and Multimodal applications
 - Writing scripts for distributed training over 8 GPUs in Pytorch using HuggingFace's accelerate
 - Scrapping and extraction of features from huge datasets (200+ GiB) with multimodal data (text / video / images)Projects include :
 - Multimodal model for highlight proposal in long videos
 - Generative Adversarial Networks (GAN) for paired and unpaired image to image translation
 - Video retrieval with image/text similarity using CLIP model (74% top-1 Accuracy, 96% top-10 Accuracy over 1024 queries)
- Feb 2021–Jun 2021
- Machine Learning Engineer Intern**, JUSTAI, PARIS.
 - Building Proof of Concepts for applications using Deep Learning models in NLP using HuggingFace's transformers
 - Writing data processing & data visualization algorithms in Python
 - Trainer for courses about Deep Learning Fundamentals for developers & AI project management

Projects

- Jan 2022–Ongoing
- GAN-JAX [Code]**, *Self-motivated*.
 - Implementation of various GAN models with the JAX-Flax framework
 - Vanilla GAN, WGAN, Conditional GAN, InfoGAN, CycleGAN, CUT
- Jan 2022– Feb 2022
- SOTA Romanian Speech Recognition Model [Model]**, *HuggingFace & OVHCloud*.
For HuggingFace's Robust Speech Recognition Challenge
 - Finetuning a Wav2Vec2 model for Romanian Speech Recognition using HuggingFace's transformers
 - Boosting the model with a 5-gram language model, using the pyctcdecode library
 - The model achieved top-1 on the Leaderboard of the event in Romanian, and beat the previous State-of-the-art with a WER of 7.31% and a CER of 2.17% on the Common Voice 8.0 benchmark
- July 2021
- T5-VAE [Demo]**, *HuggingFace & Google Cloud Platform*.
For HuggingFace's JAX/Flax Community Week Event
 - Finetuning a T5 language model as a Variational AutoEncoder, for smooth text interpolations
 - Code written with the JAX & Flax frameworks for Python
 - Project ranked Top-15 on the event over 100+ projects

Skills

- Languages
- Python, Java, SQL, Bash, C, \LaTeX
- Frameworks
- PyTorch, Tensorflow, Keras, JAX, Flax
- ML libraries
- transformers, accelerate, datasets, Weights&Biases, Gradio
- Utilities
- Anaconda, Git, Jupyter Notebook, OVHCloud
- Spoken Languages
- French (native), English (Full professional proficiency : 990/990 TOEIC)

Certifications

- Oct 2020
- GAN Specialization [LINK]**, *DeepLearning.ai*.
3 courses, 10 weeks specialization to learn state-of-the-art deep learning techniques to build GAN models