



# SIMON THOMINE

PH.D

Research Engineer at VitaDX

## CONTACT

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[LinkedIn](#)

[Google Scholar](#)

[Github](#)

[Portfolio](#)

## EDUCATION

2017-2020

### ENGINEERING DEGREE

Télécom Saint-Etienne, Saint-Etienne  
Specialty : image application development

2014-2016

### PREPARATORY CLASS

Lycée Pierre-Gilles De Gennes, Paris  
MPSI-PSI

## LANGUAGES

- French (Fluent)
- English (Proficient)
- Spanish (Basic)

## INTERESTS

- Personal [teaching projects](#)
- Artificial Intelligence
- Scientific Culture
- Miscallaneous Reading
- Sport and Health Science
- Podcasts (Lex Fridman, Peter Abbeel)

## WORK EXPERIENCE

- **Research Engineer** OCTOBER 2024-PRESENT  
VitaDX
  - Medical image analysis with deep learning for bladder cancer diagnosis
- **ph.D student and research engineer** MAY-SEPTEMBER 2024  
University of Technology of Troyes, Troyes
  - Victim detection at disaster sites using drones and deep learning
- **ph.D student and research engineer** 2021-APRIL 2024  
University of Technology of Troyes and Aquilae, Rosières-près-Troyes
  - ph.D project on unsupervised anomaly detection : knowledge distillation, contrastive training, VLM, transfer learning.
  - Computer vision research and engineering projects : package tracking in a warehouse, fall detection, unsupervised anomaly detection, people/vehicle counting, drones vision for solar panel and agriculture, intrusion detection, railroad crossing supervision, multi-camera person tracking.
- **Internship** 2020  
Aquilae, Rosières-près-Troyes
  - Implementation of a camera calibration algorithm.
  - Computer vision projects : Vehicle re-identification and tracking, neural network (CNN) training.
- **Internship** 2019  
Préfecture de police de Paris, Paris 13
  - Vehicle make/model recognition based on a convolutional neural network (CNN) architecture.

## SKILLS

### THEORITICAL

Convolutional Neural Networks, Knowledge Distillation, Vision Transformer, Object Tracking, LLM/VLM, Application Development, Classical Computer Vision

### SOFTWARE

Python, C++, Pytorch, Transformers, Torchvision, OpenCV, Numpy, Pillow, Timm, Scikit-learn, Scikit-image, QT, TensorRT, Git, Docker

### EDUCATION

Several teaching experiences at University of Technology of Troyes and ESTP.

## ADDITIONAL QUALIFICATIONS

Deep learning Specialization Coursera : [Certificate](#)

AI for medicine Specialization Coursera : [Certificate](#)

Stanford Online Youtube course : [CS109](#), [CS236](#)

Participation in the territorial final of the MT180 competition : [Youtube Live](#)