VETTER THOMAS

Mechatronics Engineer

Specialized in **Embedded Systems** and **Machine Learning**

GENERAL INFORMATION

Gewerbestraße 14, Kehl
thomasvet4@gmail.com
+ 49 17 77 70 34 78
LinkedIn

SOFT SKILLS

Autonomy, adaptability, organized, and cleanliness

LANGUAGES

- French (fluent)
- English (fluent)
- German (B2)
- Vietnamese (B1)

CERTIFICATIONS

- LanguageCert, C2 level in English

COMPETENCES

- TinyML, Edge AI
- Hardware and Software co-design (FPGA)
- Embedded Systems (STM32, TI, etc.)
- Signal Processing
- Control Theory

TOOLS

- STM32 ecosystem (with FreeRTOS)
- Intel Quartus Prime
- C++ / C, Python
- PyTorch, Tensorflow
- MATLAB

INTERESTS

- Table Tennis
- Automotive Industry
- Video Games

SUMMARY

I'm an Embedded AI engineer at iDEMoov seeking PhD opportunities in embedded/edge AI. Motivated to develop as a researcher while deepening expertise in the field of edge AI.

EDUCATION

Master in Mechatronics, Energy and Intelligent Systems (Top 3)
Université de Strasbourg, 2023-2025

Bachelor in Engineering Sciences (Top 10)
Université de Strasbourg, 2020-2023

WORK EXPERIENCE

iDEMoov
Embedded AI Engineer
Entzheim, Current Position

Optimize TinyML algorithms using state-of-the-art compression and C/CMSIS libraries. I'm currently working on a two-word, lightweight CNN-based keyword-spotting system on STM32L4.

Embedded AI Intern
Entzheim, Feb 2025 - Aug 2025

Developed and optimized a lightweight embedded AI–based fall-detection algorithm on an STM32L4 microcontroller, achieving real-time inference with minimal memory and energy footprints.

ICUBE
Research Intern
Strasbourg, Illkirch-Graffenstaden, Jun 2024 - Aug 2024

Estimation of atmospheric dispersion during fires using an Extended Kalman Filter, based on the well-known Gaussian Puff model.

IREPA LASER
IT Intern
Strasbourg, Illkirch, Jun 2023 - Aug 2023

Creation of technical indicators using information from industrial machines, achieved through the use of web APIs and BIRT.

UNIVERSITY PROJECTS

Anomaly detection on images, Master 2

Anomaly detection on milling images, in a semi-supervised setting. Tested different models such as : CAE, CAAE, SAGAN, Vision Transformer. We then fine-tune a model in order to use it in an embedded environment.

Hackathon, Master 2

Took part in University organized Data Challenge. Subject consisted of anomaly detection on time series data, using semi-supervised models (AE, LSTM-AE, OcSVM, etc.).