

Tim Lebailly

Website: timebailly.com

Mobile: +32 474321777

Email: tim.lebailly@gmail.com

GitHub: [tileb1](https://github.com/tileb1)

G-Scholar: [Tim Lebailly](#)

Linkedin: [Tim Lebailly](#)

I am a PhD student conducting research at the intersection of machine learning and computer vision. My primary research interests include self-supervised and multi-modal learning (vision-language). I have (co-)first author publications at top-tier conferences including **CVPR**, **ICCV** and **WACV**. I am looking for a research internship (**2024, anytime**) to contribute to cutting-edge AI that can make a positive impact on our world.

EDUCATION

- **KU Leuven** Leuven, Belgium
PhD in Machine Learning & Computer Vision; supervised by Tinne Tuytelaars Apr 2021 – Apr 2025
- **Swiss Federal Institute of Technology Lausanne (EPFL)** Lausanne, Switzerland
Master of Science in Data Science; GPA: 5.75/6.0; ranked 2nd out of 94 students Sep 2018 – Mar 2021
- **KU Leuven** Leuven, Belgium
Bachelor of Science in Computer Science and Electrical Engineering; Cum Laude Sep 2015 – Jun 2018

EXPERIENCE

- **KU Leuven** Leuven, Belgium
Teaching Assistant Sep 2021 – Present
 - Lead computer vision expert for a class of around 100 students.
 - Role includes: teaching, advising students, grading and material preparation.
- **Oracle Labs** Zurich, Switzerland
Machine Learning Research Intern Sep 2020 – March 2021
 - Developed state-of-the-art algorithms along implementation in production-ready codebase.
 - This research output was part of my master thesis which obtained a perfect grading (6.0/6.0) at EPFL and led to a **US patent** (US20230199026A1).
- **EPFL CVLAB** Lausanne, Switzerland
Research Intern Feb 2020 – June 2020
 - Conceived end-to-end human motion prediction pipeline beating previous state-of-the-art models which led to publication: Lebailly et al., Motion Prediction Using Temporal Inception Module, ACCV 2020.
- **IBM** Brussels, Belgium
Machine Learning Intern Jul 2019 – Sep 2019
 - Prototyped multiple machine learning models for bank loan default prediction based on a biased dataset.
 - Identified non-fair outcome for women and reduced bias by 95% using diverse proprietary algorithms.

SELECTED PUBLICATIONS (SEE GOOGLE SCHOLAR FOR MORE)

- **CrIBo: Self-Supervised Learning via Cross-Image Object-Level Bootstrapping.**
T. Lebailly*, T. Stegmüller*, B. Bozorgtabar, JP. Thiran and T. Tuytelaars (* denotes equal contribution)
Under review at **ICLR 2024** (top 2% average rating): <https://arxiv.org/abs/2310.07855>
- **Adaptive Similarity Bootstrapping for Self-Distillation based Representation Learning.**
T. Lebailly*, T. Stegmüller*, B. Bozorgtabar, JP. Thiran and T. Tuytelaars (* denotes equal contribution)
ICCV 2023: IEEE/CVF International Conference on Computer Vision
- **CrOC: Cross-View Online Clustering for Dense Visual Representation Learning.**
T. Stegmüller*, T. Lebailly*, B. Bozorgtabar, T. Tuytelaars and JP. Thiran (* denotes equal contribution)
CVPR 2023: IEEE/CVF Conference on Computer Vision and Pattern Recognition
- **Global-Local Self-Distillation for Visual Representation Learning.**
T. Lebailly and T. Tuytelaars
WACV 2023: IEEE/CVF Winter Conference on Applications of Computer Vision

SKILLS

- **Programming languages:** Python, C, CUDA, Java, MATLAB.
- **Technologies:** PyTorch, Numpy, Scikit-learn, Scipy, Pandas, Matplotlib, HPC, Slurm, Git, Linux, Containerization.
- **Languages:** French (Native), English (Fluent), Dutch (Fluent).

AWARDS

- 1.1M GPU-hour grant on LUMI (3rd fastest supercomputer in the world) via CSCS (Switzerland) and EuroCC Belgium.
- SEMP Scholarship: Swiss-European Mobility Programme.
- 6th place at Physics Olympiad (National).