



Thibault LEJEMBLE

EPITA - LRE
14 Rue Claire Pauilhac
31000 Toulouse - FRANCE
thibault.lejemble@epita.fr

Homepage
thibaultlejemble.github.io

Google Scholar
bit.ly/34Tri2D

GitHub
github.com/ThibaultLejemble

LinkedIn
linkedin.com/in/tljbml

- C++
- Python
- C
- CUDA
- PyTorch
- TensorFlow
- Docker
- CMake
- Git

POSITION

Associate Professor EPITA - LRE, Toulouse since Oct. 2022
Member of the Image team at LRE
Associate member of the STORM team at IRIT

Invited Researcher INRIA, Sophia-Antipolis July - Sept. 2023
3IA Côte d’Azur “Invited Researcher” Chair in the TITANE team

Research Engineer EasyMile, Toulouse 2021 - 2022

EDUCATION

PhD IRIT - University of Toulouse 2017 - 2021
Thesis: **Multi-scale point cloud analysis**
Defended on 09/12/2020, founded by a LabEx CIMI scholarship

Supervisor	Loïc Barthe	Toulouse University Professor
Co-supervisor	Nicolas Mellado	CNRS Researcher
Reviewer	Julie Digne	CNRS Researcher
Reviewer	Marc Alexa	TU Berlin Professor
Examiner	Mathieu Desbrun	Caltech Professor
Examiner	Mathias Paulin	Toulouse University Professor

Master II Université Toulouse III Paul Sabatier 2016 - 2017

Engineering School ENSIMAG, Grenoble 2013 - 2016

PUBLICATIONS

International peer-reviewed journal

- PCEDNet: a lightweight neural network for fast and interactive edge detection in 3D point clouds* 2021
C-E Himeur, T Lejemble, T Pellegrini, M Paulin, L Barthe and N Mellado
ACM Transactions on Graphics (Siggraph)
- Stable and efficient differential estimators on oriented point clouds* 2021
T Lejemble, D Coeurjolly, L Barthe and N Mellado
Computer Graphics Forum (Symposium on Geometry Processing)
- Persistence analysis of multi-scale planar structure graph in point clouds* 2020
T Lejemble, C Mura, L Barthe and N Mellado
Computer Graphics Forum (Eurographics)
- SLAM-aided forest plot mapping combining terrestrial and mobile laser scanning* 2020
J Shao, W Zhang, N Mellado, N Wang, S Jin, S Cai, L Luo, T Lejemble and G Yan
ISPRS Journal of Photogrammetry and Remote Sensing

International workshop

- SHREC'19 track: Feature curve extraction on triangle meshes* 2019
E. Moscoso Thompson, G Arvanitis, K Moustakas, N Hoang-Xuan, E R Nguyen, M Tran
T Lejemble, L Barthe, N Mellado, C Romanengo, S Biasotti, and B Falcidieno
Eurographics Workshop on 3D Object Retrieval
- SHREC'18 track: Recognition of geometric patterns over 3D models* 2018
S Biasotti, E Moscoso Thompson, L Barthe, S Berretti, A Giachetti, T Lejemble, N Mellado,
K Moustakas, Iason Manolas, Dimitrios Dimou, C Tortorici, S Velasco-Forero, N Werghe,
M Polig, G Sorrentino, and S Hermon
Eurographics Workshop on 3D Object Retrieval

International Conference

- Interactive procedural simulation of paper tearing with sound* 2015
T Lejemble, A Fondevilla, N Durin, T Blanc-Beyne, C Schreck, P-L Manteaux, P G Kry
and M-P Cani
ACM SIGGRAPH Conference on Motion in Games

National conference

- Direct least-squares fitting of ellipsoid to 3D oriented points for point cloud processing.* 2023
T Lejemble, A Bains, L Arnal-Anger, L Barthe and N Mellado
Journées Françaises d'Informatique Graphique
- Multi-scale planar segments extraction from point clouds* 2018
T Lejemble, C Mura, L Barthe and N Mellado
Journées Françaises d'Informatique Graphique

TEACHING

*course coordinator

EPITA (2023 - 2024)

Point Cloud Processing*, Master 2	9h CM, 9h TP
GPU Programming*, Master 1	4h CM, 11h TP
Advanced GPU Programming*, Master 2	4h CM, 11h TP
Artificial Intelligence*, Master 1	10h CM, 20h TP
Advanced Artificial Intelligence*, Master 2	4h CM, 14h TP
Matrix Calculus, Licence 3	10h CM, 2×12h TP
Operational Research, Licence 3	12h TP
TOTAL	41h CM, 101h TP

EPITA (2022 - 2023)

Point Cloud Processing*, Master 2	9h CM, 9h TP
GPU Programming*, Master 1	4h CM, 11h TP
C++ Programming, Licence 3	8h CM
Computer Network, Licence 3	8h CM, 2×10h TP
Matrix Calculus, Licence 3	2×12h TP
Graph Theory, Licence 3	6h CM
Assembly x86, Licence 3	6h CM, 2×6h TP
Assembly 68000, Licence 2	2×10h TP
Operational Research, Licence 3	4h TP
TOTAL	41h CM, 100h TP

Working at **EPITA** also includes

- participation to the creation of a new Master SSIE: Safety, Security and Artificial Intelligence in Embedded Systems (“Sûreté et Sécurité de l’Intelligence Embarquée”)
- internships follow-up (around 20 students per year in Master 1)
- apprenticeship follow-up (around 4 students per year in Master 1 and 2)
- coaching and evaluation of oral presentations during several projects
- interviews of candidates to the “Concours Advanced” (to join EPITA after Baccalauréat or after CPGE prépa)
- participation to several “Journées Portes Ouvertes” (open-house school day)
- participation to several “Journées Immersives” (introducing high school students to computer science)
- supervision of students in Master 1 and 2 in a research initiation program

Université Toulouse III Paul Sabatier (Doctorant Contractuel Chargé d'Ens., 2019 - 2020)

Applied Mathematics and Scientific Computing, Master 1	14h TD, 6h TP
Algorithms and Programming, Licence 2	30h TP
Computer Science, Licence 1	14h TP
TOTAL	14h TD, 50h TP

Université Toulouse III Paul Sabatier (Doctorant Contractuel Chargé d'Ens., 2018 - 2019)

Computer Graphics and Image Processing, Licence 3	2×4h TP
Data Structures, Licence 2	28h TP
Algorithms and Programming, Licence 2	30h TP
TOTAL	66h TP

Université Toulouse III Paul Sabatier (Doctorant Contractuel Chargé d'Ens., 2017 - 2028)

Computer Graphics and Image Processing, Licence 3	2×4h TP
Data Structures, Licence 2	28h TP
Algorithms and Programming, Licence 2	30h TP
TOTAL	66h TP

OTHER EXPERIENCES

Member of the UNREAL project-team (LabeX CIMI, IMT, IRIT, and LAAS)	2022 - 2023
Reviews	2020 - 2023
• Transactions on Graphics (ACM)	
• Computer Graphics Forum (Wiley-Blackwell)	
• CAD Computer Aided Design (Elsevier)	
• ISPRS Journal of Photogrammetry and Remote Sensing (Elsevier)	
3 months PhD mobility at TU Berlin (cut short due to the pandemic)	2020
Eurographics <i>Doctoral Consortium</i>	2019
Eurographics Poster	2019
Presentation at GTMG days (CNRS workshop)	2019
Demonstration during IRIT assessment by the HCÉRES	2019
Organization and animation of the STORM team weekly seminars	2017 - 2019
Member of the <i>Commission des Doctorants</i> of IRIT	2017 - 2018
PhD Trainings	2017 - 2019
• Ethics in science	
• Theatrical practices for didactics	
• Mastering the body and space	
• Bibliometrics and research evaluation	
• Intellectual property in science	