Melvin Even

EXPERIENCE —

PhD Student (Computer Graphics)

2021-2024

INRIA, University of Bordeaux

Thesis: Computer-assisted 2D Animation

My research focuses on developing new methods to design and explore motion for traditional 2D animation by providing real-time animation preview from (rough) key drawings and non-linear editing of the preview (redrawing, trajectory constraints, spacing).

Industrial partner: Praxinos

Research Intern (Computer Graphics, 3D Animation)

2020

INRIA

I worked with a PhD student on an artist-guided method for geometric deformations resulting from contacts in 3D animation.

EDUCATION –

PhD Student (Computer Graphics)

2021-2024

INRIA, University of Bordeaux

Thesis: Computer-assisted 2D Animation Supervisors: Pascal Barla and Pierre Bénard

Funds: ANR Mostyle

M.Sc in Computer Science

2019-2021

Bordeaux Institute of Technology

Majors: Artificial intelligence and computer graphics.

Graduated with honours

B.Sc in Computer Science

2016-2021

University of Bordeaux

General computer science curriculum

Graduated with honours

SOFTWARES —

Frite

A 2D animation research prototype developed as part of my PhD thesis. The project is based on Pencil2D and was started by the research group I am part of. I am the main contributor of the project.

The public release of the project is available on Github.

LilTracer

CPU path-tracer and BRDF analyser for personal use. Initially started by a colleague in my research group. I implemented various algorithms for the project. The public release of the project is available on Github.

PUBLICATIONS —

- [1] J. Chen, X. Zhu, M. Even, J. Basset, P. Bénard, and P. Barla. "Efficient Interpolation of Rough Line Drawings". In: *Computer Graphics Forum* (2023). doi: 10.1111/cgf. 14946.
- [2] M. Even, P. Bénard, and P. Barla. "Non-linear Rough 2D Animation using Transient Embeddings". In: *Computer Graphics Forum* (2023). ISSN: 1467-8659. doi: 10.1111/cgf.14771.

TALK ----

[1] M. Even, J. Basset, P. Bénard, and P. Barla. "Motion and layout depiction using 2D/3D animation tools". Vision and Depiction. 2024. uRl: https://inria.hal.science/hal-04617731.

REVIEWING ACTIVITIES—

ACM Transactions on Graphics (TOG), 2024 and 2023 Computer & Graphics, 2024

AWARDS —

- Best paper award at Pacific Graphics 2023 for "Efficient Interpolation of Rough Line Drawings"
- 1st prize at *Prix des droits de l'homme René Cassin 2014* (national high shcool art competition)

TEACHING EXPERIENCE —

Institut d'Optique Graduate School

Numerical methods 2024

MATLAB, linear and non-linear optimization, FEM for first master's student.

C++ programming 2024

Introduction to C++ and OOP for first master's student.

University of Bordeaux

Introduction to computer science 2023

Introduction to computer science for first year students.

Bordeaux Institute of Technology

Functional programming 2022

Introduction to OCaml and functional programming.

SKILLS ----

Languages

French (native), English (TOEIC 990/990), basic Japanese

Technologies

Mainly C/C++, C#, Python, OpenGL, Qt