GINGER DELMAS

>>> PhD student.

EXPERIENCE

PhD candidate

Institut de Robòtica i Informàtica Industrial, Dec CSIC-UPC & Naver Labs Europe

December 2021 - now

- Leveraging text to improve human pose, shape, motion estimation and generation.
- **PoseScript**: introduce a dataset of 3D human poses and human-written descriptions. Develop models for text-to-pose retrieval and generation (patent & **ECCV 2022 paper**).
- PoseFix: introduce a dataset of 3D human pose pairs and human-written modifying instructions. Develop models for text-guided pose edition and correctional text generation (ICCV 2023 paper).

Research Engineer in Computer Vision

Naver Labs Europe

November 2020 - December 2021

- Text-enhanced image search & text-to-pose retrieval.
- Text-enhanced image search: develop a new method that combines typical approaches from visual search and cross-modal retrieval (patent & ICLR 2022 paper).
- Link 3D human poses to structural descriptions in natural language by designing an automatic pose captioning pipeline to train a text-to-pose retrieval model (related to the PoseScript paper).

Research Intern in Computer Vision

Naver Labs Europe

April 2020 - October 2020

Multi-Modal Retrieval on the Fashion IQ dataset: text-enhanced image search. Distinguished Presentation Award (Intern day)

Design a model for text-enhanced image search, starting from a state-of-the-art cross-modal retrieval model between images and text. System integration in a Naver-internal demo platform.

DUCATION

International Computer Vision Summer School (ICVSS)

Sicily

July 2023

"From perception to action." (examination certificate).

Master's degree "Mathematics, Vision, Learning" (MVA)

Université Paris-Saclay & Institut Polytechnique de Paris

2019 - 2020

- Mathematics and Computer Science, Applied Mathematics specialization (grade: 17.1). Computer Vision, NLP, Data Science, Deep Learning, Signal Processing, Reinforcement Learning.
- Computer Vision projects: bird image classification, meter reading (ENS Challenge Data).
- 3D projects: point cloud manipulation and classification, artificial 3D vision.
- Speech & NLP projects: grammatical parsing of sentences, voice commands classification.

Engineering degree in Computer Sciences

Télécom Paris (ex-ENST), Institut Polytechnique de Paris

2017 - 2020

Specialization in Data Science & 3D and Interactive Systems (cumulated GPA: 4).
Machine Learning, Database, Web Data, Data visualization, Computer Graphics.

Classe préparatoire: preparatory class for the French grandes écoles 2015 - 2017

PUBLICATIONS & PATENTS

- PoseFix: Correcting 3D Human Poses with Natural Language, Ginger Delmas, Philippe Weinzaepfel, Francesc Moreno-Noguer, Grégory Rogez, ICCV 2023
- % PoseScript: 3D Human Poses from Natural Language, Ginger Delmas, Philippe Weinzaepfel, Thomas Lucas, Francesc Moreno-Noguer, Grégory Rogez, ECCV 2022
- % ARTEMIS: Attention-based Retrieval with Text-Explicit Matching and Implicit Similarity, Ginger Delmas, Rafael S. Rezende, Gabriela Csurka, Diane Larlus, ICLR 2022
- % Data compatibility for text-enhanced visual retrieval, *Rafael Sampaio De Rezende, Diane Larlus, Ginger Delmas, Gabriela Csurka Khedari*, U.S. Patent Application No. 17/847,848. 2023

CONTACT

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- Personal webpage Google Scholar

RESEARCH INTERESTS

Computer vision.

Linking text with other modalities.

Multi-modal retrieval, 3D human pose

modeling, text generation.

TECHNOLOGIES

↑ Linux

P Git

</> Python (Pytorch), Java,
 SQL, C, C++ (OpenGL 4.5),
 HTML5, LATEX

LANGUAGES

- Q French Native Language
- Q English Fluent
 (102/120 pts at the IBT TOEFL)
- 🔾 Spanish Fair (B2)

ACTIVITIES

- Obtained the music theory certificate from the conservatory. Have practiced the clarinet for 13 years. Practice the cello and the piano as an amateur. Have played in different local orchestras
- Member of multiple student associations at Télécom Paris (2018-2019). WWOOFING in Finland (July 2018).
- Parkour, Climbing
- ★ USA, Canada, Australia, Asia, Europe