Guénolé FICHE
10, rue Alfred de Musset
91120 Palaiseau, France
guenole.fiche@gmail.com
(+33) 6 51 36 24 77
www.linkedin.com/in/Guenole-Fiche
https://g-fiche.github.io/
https://github.com/g-fiche

26 years old

PhD Student in computer vision - CentraleSupelec
Anticipated graduation date: 10/24

My research focuses on Computer Vision and Deep Learning. I work on 3D human pose and shape estimation from images and videos, with a focus on weakly-supervised methods (generative models, self-supervised learning).

Education

- **Since 2021** **PhD student in computer vision – CentraleSupelec (France)**
  Subject: Learned latent representations for human mesh recovery
  Keywords: Pytorch, (D-)VAE, VQ-VAE, MAE, digital humans, SMPL, 3D vision …
- **2016-2021** **Mathematic Engineering department – INSA Rouen Normandie (France)**
  Keywords: AI, Machine Learning, optimization, statistics…
- **June 2016** **Science Baccalaureate – European section – Graduate with High Honors**

Work experience

- **2023** **Visiting PhD Student - Institut de robòtica i informàtica industrial (Spain)**
  Exchange in the “Perception and manipulation” group
- **2022 - 2023** **Tutorial Assistant – INSA Rennes (France)**
  Geometry tutorials for second year students of engineering (Curves and surfaces, integrals)
- **2021** **Deep Learning 6 months internship – Polynom (France)**
  Multi-object detection and tracking
  Keywords: Python, Pytorch, YOLOv5, optical flow, Kalman Filter, GPS, orthophotos, …
- **Summer 2020** **NLP 3 months internship – Case Law Analytics (France)**
  Natural Language Processing methods applied to automated analysis of legal texts
  Keywords: Python, Tensorflow, BERT, Regex, k-means, ACP, similarity, NLI
- **Summer 2019** **Deep Learning 3 months research internship – University of British Columbia (Canada)**
  Exploring the Application of Machine Learning for Physical Problem
  Keywords: Python, Tensorflow, Deep Learning, LSTM, ML for physics, composite materials
- **2019-2021** **Sales manager and project leader - Junior Enterprise of the INSA Rouen (France)**

Publications

- *Fiche, G., Leglaive, S., Alameda-Pineda, X., & Moreno-Noguer, F. 2024. MEGA: Masked Generative Autoencoder for Human Mesh Recovery. https://arxiv.org/abs/2405.18839*
- *Fiche, G., Leglaive, S., Alameda-Pineda, X., Agudo, A., & Moreno-Noguer, F. 2024. VQ-HPS: Human Pose and Shape Estimation in a Vector-Quantized Latent Space. In European Conference on Computer Vision (ECCV).*
- *Fiche, G., Leglaive, S., Alameda-Pineda, X., and Séguier, R. 2023. “Motion-DVAE: Unsupervised learning for fast human motion denoising.” ACM SIGGRAPH Conference on Motion, Interaction and Games (MIG '23).*
- *Fiche, G., Sevestre, V., Gonzalez-Barral, C., Leglaive, S., and Séguier, R. 2023. SwimXYZ: “A large-scale dataset of synthetic swimming motions and videos.” 16th ACM SIGGRAPH Conference on Motion, Interaction and Games (MIG '23).*

Skills

Languages:	English (TOEIC test: 965) and Spanish (Advanced)
Programming:	Python (Pytorch and Tensorflow) - Notions of: R, Matlab, Java, C, C++, SQL
Areas of expertise:	Deep learning (VAE, dynamic models, probabilistic AI), 3D computer vision Generative models, weakly-supervised and self-supervised learning Virtual humans, pose and shape estimation, human motion.
Courses:	Machine Learning (Coursera) – Andrew Ng, Stanford English for research, Research communication ethics, Bayesian Data fusion
Summer schools:	Generative Modeling Summer School, Copenhagen, June 2023 Sport and IA, Antibes, October 2022

Hobbies

Sports : Tennis, Volleyball, Running…

Music : Musical education and guitar practice
Music studies section – INSA de Rouen

Language learning : Hindi

Other experiences

2022 **Reviewing**
ECCV, CVPR, NeurIPS

July 2018 **European Solidarity Corps - Spain**
Tourism information counsellor

2018-2019 **Volunteer Tutoring in mathematics**
Help in mathematics for INSA students