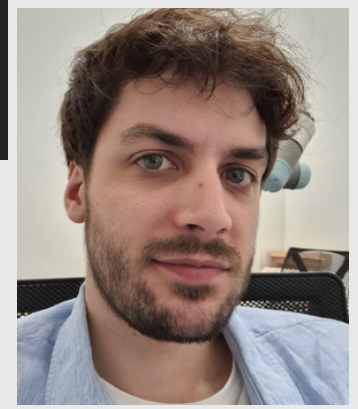# Federico Dassiè

Researcher, developer, and technologist with experience across academia and industry in computer vision, machine learning, robotic manipulation, digital humanities, and AI-driven cultural heritage applications.

✉ federico.dassie@gmail.com 🏠 Godega di Sant'Urbano (TV), Italy
📞 +39 3427689178 🌐 https://dassoo.github.io/

💼 Work Experience

Mar 2024-Mar 2025 — **Research Fellow** - *Center for Cultural Heritage Technology (CCHT-IIT), Venice (Italy)*
- Designed and implemented robotic manipulation workflows for material transport and scanning (UR, Robotiq).
- Developed 3D reconstruction pipelines leveraging SfM, NerF, and Gaussian Splatting.
- Participated in CTE-Genova project, focusing on the automated digitization of archaeological artifacts.

Feb 2022-Feb 2024 — **Python Developer** - *ArchiVe (Fondazione Giorgio Cini), Venice (Italy)*
- Developed automated pipelines for image post-processing and object detection using PyTorch and Detectron2.
- Contributed to the digital preservation of cultural heritage through advanced Computer Vision techniques.

2020-2021 — **Web Developer** - *VeDPH (Venice Center for Digital & Public Humanities), Venice (Italy)*
- Collaborated on the interactive webdoc "I conti con la Storia", exploring the representation and perception of racial laws in the history of TV and historiography, made for Ca' Foscari University

🎓 Education

Ca' Foscari University, Venice (Italy)
- Master's Degree in Digital & Public Humanities (2022)
- First Level Master in Digital Humanities (2020)
- Bachelor's Degree in History (2019)

ITST J.F. Kennedy (PN)
- Diploma in Computer Science (2016)

💬 Languages

- Italian: native speaker
- English: advanced (C1)
- German: beginner (A2)
- French: beginner (A1)

🖥 Technical Skills

Python
AI, CV & ML: *OpenCV, Detectron2, Scikit-learn, LangChain/LangGraph (RAG, Agentic AI)*
Frameworks: *Django, FastAPI + Next.js (Typescript)*
Data Analysis: *Pandas, Matplotlib, Seaborn*
3D Reconstruction: *Nerfstudio, COLMAP*

HTML/CSS, Javascript, SQL

Others
Web & Multimedia: Adobe Suite, OBS Studio, Microsoft Office
Digital Humanities: Digital epigraphy, paleography, GIS georeferencing
Robotics: UR + Robotiq/3D scanners and cameras integration (RTDE, Polyscope), Genesis
Systems & IT: Windows/Linux, Networking, SSH, Firewall configuration, VirtualBox, scripting (Bash, Python)

🔖 Publications

- **DARS: A Dual-Arm Robotic System for Autonomous 3D Artifacts Scanning** – (submitted to) IEEE/RSI IROS, 2025
- **AAPOE: Automated Artifacts Position and Orientation Estimation in Cultural Heritage** – IEEE/ASME MESA, 2024
- **Machine Learning and Computer Vision in the Humanities** – Master's Thesis (UniVe), 2022