# Curriculum Vitae (last update: October 2024)

## Education

2022-2026 University of Cambridge, PhD in English/Digital Art History (Faculty of English).

Gates Cambridge Scholar Supervisor: Leonardo Impett

Research topic: Nineteenth-century textile patterns in Britain: circulation between places, periods and media.

2021-2022 Pantheon-Sorbonne University, M.A. (1) in art history - Highest Honors: 17.0/20.

Master's Thesis Supervisor: Sophie Cras

Research topic: digital images in the age of computer vision - Trevor Paglen and Hito Steyerl.

2020-2021 Pantheon-Sorbonne University, B.A. in art history and archeology - Highest Honors: 16.7/20.

> Relevant courses: Historiography of art history, Artistical institutions, Ancient Greek art, Gothic arts, The Renaissance in France and Italy, Artistic creation in the 18th century, 19th century, 20th century, History of Photography, Contemporary art.

2019-2020 ENS Paris-Saclay, M.Sc. in applied mathematics, Math., Vision, Learning (MVA) - Highest Honors: 17.2/20. Relevant courses: Computer vision and object recognition, Convex optimization, Probabilistic Gaphical Models, Topological Data Analysis, Reinforcement learning, Computational statistics, Algorithms for speech and NLP, Bayesian machine learning.

2018–2019 Mines ParisTech, M.Sc. in engineering & applied mathematics - Academic exchange, Highest Honors: 3.6/4. Minor in Geostatistics and Applied Probabilities.

> Relevant courses: Statistical learning, Data analysis, Image analysis, Introduction to Law, Labor Law, Cost Accounting, Corporate Governance, Quantum Information.

2016–2018 Mines Saint-Etienne, M.Sc. in engineering & applied mathematics - Highest Honors, Top 10%. Relevant courses: High Performance Computing, Network Architecture, Big Data, Signal Processing, Numerical Analysis, Statistics, Micro & Macro Economics, Quantum Physics, Fluid Mechanics.

2013–2016 Lycée Henri IV, Classe préparatoire, PCSI & PC\* - Paris, France.

# Work experiences

October 2020 Research engineer in digital humanities, Observatoire de Paris, CNRS, SYRTE.

- June 2022 Affiliation: ALFA Laboratory, DISHAS team - supervisor: Matthieu Husson

Projects: • Astronomical medieval tables structure recognition, and hand-written text recognition.

• Use of deep features to navigate in datasets of mathematical diagrams (image retrieval, clustering, dimensionality reduction).

April – August Graduate research assistant, Observatoire de Paris & Ecole des Ponts ParisTech, SYRTE & Imagine.

Supervisors: Matthieu Husson, Mathieu Aubry

Project: Segmentation of medieval manuscripts, table structure recognition - in collaboration with historians of science.

April – Augus Graduate research assistant, ENS Paris-Saclay, Borelli Center.

2019 Supervisors: Laurent Oudre, Nicolas Vayatis

Project: Multimodal analysis of locomotion: detection, recognition and classification of patterns (time series).

June – August Undergraduate research assistant, Pasteur Institute, Center of Bioinformatics & Biostatistics.

2018 Affiliation: Evolutionary Bioinformatics Laboratory

Supervisors: Olivier Gascuel, Mathieu Moslonka

Project: Prediction of epidemiological parameters from ARN viruses genetic trees, using deep neural networks.

#### Grants

Sept. 2024 Cambridge Digital Huamnities Methods Fellowship: "Re-Mediating Archival Photographs through Computer Vision: Methods for Exploring the Violence of Images", £1,200.

August 2024 University of Cambridge, Centre for Research in the Arts, Humanities and Social Sciences (CRASSH): Research Network Grant, "textile - digital: blurred boundaries between materiality and virtuality", £1,500.

February 2024 Paul Mellon Centre Research Grant: "Weaving patterns in Victorian Britain (1840-1914) - circulation between periods, places and media", £700.

January 2024 CNRS: International workshop organisation grant, "Moving patterns. The circulation of textile motifs, from the industrial age to computer vision", €5,000.

May 2023 Cambridge Digital Humanities Awards: Am I normal?, Artistic installation, £600.

Sept. 2022 **Gates Cambridge scholarship:** PhD in digital art history,  $\approx$  £200,000.

#### Teaching

2024-25 Undergraduate supervisor, Approaches to the History of Art and Architecture (Historiography), University of Cambridge, Department of History of Art.

- 2024-25 **Cambridge Digital Humanities Methods Fellow**, "Re-Mediating Archival Photographs through Computer Vision: Methods for Exploring the Violence of Images", University of Cambridge. (10 hours of teaching, course designed by myself).
- Nov. 2022 **Project teacher**, Digital Humanities Meet Artificial Intelligence, PSL University & ENS Master Course, Intensive Week. (35 hours of teaching, course designed by myself).
- March 2022 **Project teacher**, Digital Humanities Meet Artificial Intelligence, PSL University & ENS Master Course, Intensive Week. (35 hours of teaching, course designed by myself)
- March 2021 **Project teacher**, Digital Humanities Meet Artificial Intelligence, PSL University & ENS Master Course, Intensive Week. (35 hours of teaching, course designed by myself)

# Academic presentations and invited lectures

- June 2024 "Moving Motifs in 19th century Britain: On the Global Circulation of Textile Patterns in the Industrial Age", Image Deluge & Globalization, University of Geneva, Conference.
- June 2024 "Weaving patterns in Victorian Britain (c. 1840-1900) circulation between places, periods and media", Computer Vision and Art History Today, The Pennsylvania State University, Conference.
- May 2023 "Following the grid: on some prefigurations of digital art history", Styles Revisited: From Iconology to Digital Image Studies, University of Geneva, Seminar.
- April 2023 "Discrete image, grid, matrix: possibilities of encoding/decoding (weaving/unweaving), From Hype to Reality: Artificial Intelligence in the Study of Art and Culture, University of Zurich, Symposium.
- Dec. 2022 "Computer vision and artwork analysis", Des chiffres et des arts, ENS, Lecture.
- Nov. 2021 "Automatic table transcription in manuscripts", Digital Humanities Meet Artificial Intelligence, ENS Seminar.

#### Book reviews

2024 "Evanghelia Stead, Goethe Faust 1 Outlined. Moritz Retzsch's Prints in Circulation", Tristan Dot, *Belphégor*, 22-2, 2024 (forthcoming).

## Publications in Computer Science

- 2020 "Non-Linear Template-Based Approach for the Study of Locomotion", Tristan Dot, François Quijoux, Laurent Oudre, Aliénor Vienne-Jumeau, Albane Moreau, Pierre-Paul Vidal, David Ricard, *Sensors* 2020, 20, 1939.
- 2019 "Deep learning from phylogenies to understand the dynamics of epidemics", Jakub Voznica, Anna Zhukova, Tristan Dot, Kary Ocaña, Frédéric Lemoine, et al.., Epidemics 7th International Conference on Infectious Disease Dynamics, Dec 2019, Charleston, United States.

# Artistic outputs and demos

- 2024 Am I Normal?, interactive installation funded by a Cambridge Digital Humanities Award.
- 2021 Dreamy Cops video artwork selected at the 2021 Computer Vision Art Gallery.
- 2018 Welcome To My Website!, a random journey in the (vanishing) world of personal webpages created with Tristan Stérin. [demo link]

#### Academic events organisation

- 2024-25 Research Seminar, "textile digital: blurred boundaries between materiality and virtuality", Centre for Research in the Arts, Humanities and Social Sciences (CRASSH), University of Cambridge.
- Dec. 2024 International workshop, "Moving patterns. The circulation of textile patterns, from the industrial age to computer vision", CNRS, INHA, Laboratory InVisu.
- April 2024 Workshop, "textile digital", Cambridge Digital Humanities, University of Cambridge.

## Public engagement

- March 2024 "Seeing the world through AI", interview, University of Cambridge Cambridge Festival (2024)...
  - May 2023 "On the new nature of surveillance images", brief article, *The Scholar*.
- Sept. 2022 "The study of images in the computer age", interview, Gates Cambridge website.

#### Software development

2022 Table Transcriber, an automatic pipeline for astronomical tables transcription. [report link]

Programming Python (inc. PyTorch), C, R, Matlab.