Curriculum Vitae: Mathieu Aubry

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Born	May 1st, 1987		6-8, Av Blaise Pascal
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Education

2019 Habilitation à diriger des recherches (HDR, Highest French diploma in academia, necessary to become full professor) in Computer Science, UPE (Marne la Vallée, France)
Title: *Neural Networks for Cross-Modal Recognition and Vector Object Generation*

2015 PhD in Computer Science, defended May 8th, 2015, École Normale Supérieure (Paris, France)
Advisors: Josef Sivic (INRIA) and Daniel Cremers (TU Munich)
Title: *Representing 3D models for alignment and recognition*

2011 Master in Applied Mathematics, ENS Cachan (Cachan, France)

2011 Engineering degree, École Nationale des Ponts et Chaussées (ENPC, Champs-sur-Marne, France)

2009 Engineering degree, École Polytechnique (Palaiseau, France)

Professionnal experience

2014-present	Tenured Researcher, École des Ponts ParisTech (ENPC)
2011-present	Civil servant for the French Ministry of Ecology (IPEF 2011, ICPEF 2021)
2015 (Jan-Dec)	Visiting scholar, CS department, University of California Berkeley, USA
2011 (Jan-Sep)	Research intern, Adobe System Inc. Cambridge, MA, USA
2010 (Jul-Dec)	Master Intern, CS department, Technical University Munich, Munich, Germany
2009 (Apr-Aug)	Master Intern, Linguistics department, University of California Berkeley, USA

Fellowship and awards

2023-2028	single PI of ERC starting grant DISCOVER on visual structures discovery
2022-2026	PI for ENPC of ANR EIDA project on historical astronomical diagrams
2021-2025	PI for ENPC of ANR VHS project on historical scientific illustrations
2018-2022	single PI of ANR JCJC EnHerit project on enhancing heritage image databases
2017-2018	France-Berkeley-Fund grant on Enhancing Heritage Image Databases
2015-2019	PI for ENPC in the RAPID Tabasco project on low-supervision deep learning
2015-2021	13 Gifts from Adobe to ENPC resulting from my collaborations

Supervision

Graduated PhD students (with approximate percentage of supervision):

Francisco Massa	2014-2017	80%	now at Facebook Artificial Intelligence Research
Vianney Loing	2015-2018	40%	now at Arcure
Théophile Dalens	2015-2019	30%	now at Grabango
Thibault Groueix	2016-2020	100%	now at Adobe research

*2021 2nd best PhD prizes from the french association for Artificial Intelligence (AFIA)
and the French Computer Science Society (Société Informatique de France, prix de thèse Gilles Kahn)*

Xi Shen	2017-2021	100%	now at Tecent research
Othman Sbaï	2018-2021	50%	now at Meta Reality Labs
François Darmon	2018-2022	50%	now at Meta Reality Labs
Théo Deprelle	2018-2022	100%	now at Veesual
Simon Roburin	2018-2022	33%	now post-doc at EPFL
Yann Labbé	2018-2023	20%	now at Meta

Ongoing PhD students:
    Sole supervisor of 4 PhD students and co-advisor of 4 more.

Post-doctoral fellow: Nicolas Gonthier (2021-2022, 100%, now IPEF at IGN)

Master students (2014-2023): Advised approximately 18 master students.

Teaching and organization of scientific meetings

- lectures in the MVA master from ENS Paris-Saclay ($\sim$ 6h/year, *3D reconstruction* and *Object recognition* lectures since 2015, *Deep Learning* since 2020).
- lectures in the Engineering curriculum from ENPC ($\sim$ 20h/year *signal processing and computer vision*, *machine learning* and *computer vision for mechanics of materials* lectures from 2015 to 2020), created and responsible since 2020 of a *deep learning* lecture.
- responsible for the *introduction to computer vision* course from ENS Paris ($\sim$ 30h/year, 2017-2022).
- co-organizing the Digital Humanities / Artificial Intelligence (DHAI) seminar `https://dhai-seminar.github.io/` and the associated intensive week since 2019.

Major industrial collaborations

Adobe Research. I collaborated closely with Adobe from 2014 to 2022, in particular with Bryan Russell, Matthew Fisher and Vladimir Kim, leading to 8 joint publications and 13 gifts from Adobe.

QuantCube Technology. After sporadic consulting missions (starting in 2017), we built a specific collaboration with ENPC to develop their Machine Learning expertise and my knowledge of satellite imagery applications.

Facebook. CIFRE PhD (2018-2021) with Camille Couprie at Facebook AI Research.

Valeo AI. CIFRE PhD (2019-2022) with Patrick Perez and Renaud Marlet at Valeo AI.

Reviewing Activities

Associate Editor	(2021-2023) in Elsevier's Computer Vision and Image Understanding (CVIU) journal, third journal in computer vision, impact factor 3.87 (2020).
Area Chair	CVPR (2018, 2020, 2023), ICCV (2023), NeurIPS (2023), MVA (2021), BMVC (2021, 2023), ACCV (2021, 2022)
Paper reviewing	for CVPR, ECCV, ICCV, NeurIPS, ICML, ICLR and occasionally for other conferences and journals (IJCV, PAMI, ToG). Among the top rated reviewers for CVPR 2019, NeurIPS 2019 and ECCV 2022.
Project reviewing	for ANR (french funding agency), 2019-2021.
PhD committees	Reviewer for 9 PhDs (CEA, Université Bourgogne - Franche-Comté and Universidad de Zaragoza, Telecom Paris, INRIA Grenoble, École Polytechnique, EPFL, Sapienza University of Rome, université de Normandie, université de Grenoble) and examiner for 5 additional ones.

Publications

I have co-authored 30 papers in major peer-reviewed international conferences, 10 international journal papers, a book chapter, and 2 patents. Note that the most competitive and impactful venues in computer vision are typically conferences (CVPR, ICCV, ECCV, NeurIPS): with acceptance rates around 20-30% they are among the most cited venues, e.g. according to google scholar (`https://scholar.google.com/citations?view_op=metrics_intro`) CVPR is the 4th most cited venue in all fields, after Nature, The New England Journal of Medicine and Science.
My h-index is 26, 13 of my papers have been cited more than 100 times (7 without PhD supervisors, 5 as first author, 3 as last author) and my total number of citations is 5877. Please see Google Scholar `https://scholar.google.com/citations?user=OMiPsosAAAAJ` or my webpage `http://imagine.enpc.fr/~aubrym/` for an updated list