

Dan Andrei Iliescu

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EDUCATION

- University of Cambridge, UK** Oct 2019 - May 2023
PhD Machine Learning and Data Science
:: Full scholarship from the *Alan Turing Institute*, UK's national AI research institute.
:: Developing *deep generative models* for *image-to-image translation* and *multivariate time-series predictions*.
- University of Cambridge, UK** Oct 2018 - Jul 2019
MPhil Advanced Computer Science
:: Starred distinction (+80%) in "*Machine Learning*" and "*Natural Language Processing*" courses.
:: Dissertation on missing value imputation with *Variational Autoencoders*.
- University of Manchester, UK** Sep 2015 - Jul 2018
BSc (Hons) Computer Science, *First-Class (1:1)*
:: Dissertation on visualizing the internal layers of *Generative Adversarial Networks*.



EXPERIENCE

- University of Cambridge, UK** Oct 2019 - Current
Teaching Assistant, *Department of Computer Science*
:: Teaching "*Data Science*" and "*Machine Learning and Bayesian Inference*" undergraduate courses.
- Yokai.ai, Paris, France** May 2021 - Oct 2021
Part-time Research Consultant
:: Studied, implemented and evaluated deep learning methods for assessing the quality of human face images.
- University of Manchester, UK** Jun 2018 - Sep 2018
Research Assistant, *Machine Learning Group*
:: Co-authored a paper on the trade-off between independence and specialization in *Neural Network Ensembles*.
- ARM Ltd, Manchester, UK** Jun 2017 - Sep 2017
Software Engineering Intern, *High-Performance Computing Group*
:: Co-authored a whitepaper on optimizing ML operations for vectorized CPUs.

PUBLICATIONS

- Training a Task-Specific Image Reconstruction Loss** 2022
A. Mustafa, A. Mikhailiuk, D.A. Iliescu, V. Babbar, R.K. Mantiuk
WACV
:: Topics: *computer vision, image reconstruction, deep learning, perceptual loss function*
- Disentangling Domain and Content** 2020
D.A. Iliescu, A. Mikhailiuk, D.J. Wischik, R.K. Mantiuk
Preprint
:: Topics: *variational autoencoder, disentanglement, unsupervised domain adaptation*
- To Ensemble or Not Ensemble: When Does End-to-End Training Fail?** 2020
A. Webb, C. Reynolds, D.A. Iliescu, W. Chen, H. Reeve, M. Lujan, G. Brown
ECML-PKDD
:: Topics: *ensemble neural networks, deep learning, generalized linear models*
- Arm Scalable Vector Extensions and Application to Machine Learning** 2018
D.A. Iliescu, F. Petrogalli
ARM Ltd
:: Topics: *machine learning, matrix algebra, vectorized architectures*

SELECTED PROJECTS

- AI Mosaic**, Award at *St Edmund's College, Cambridge Art Contest* 2021
Python algorithm for assembling images using patches from other images.  [/ai-painting](#)
- Computer Laboratory ML Reading Group**, University of Cambridge, UK 2019 - 2020
Organized weekly ML paper presentations for PhD students in the Computer Lab.
- Visualizing GAN Layers**, Undergraduate Thesis 2018
Plotting MNIST class information within GAN layers.  [/visualizing-GAN-layers](#)

PROGRAMMING TOOLS

- ML and Data Science:** Pytorch, Tensorflow, Scipy, Sklearn, Pandas, Plotly.
- Development:** Git, Docker, Bash, Poetry, DVC.