JAN CROSS-ZAMIRSKI

jc856@cam.ac.uk \https://crosszamirski.github.io/

SUMMARY

I am PhD student under the supervision of Professor Carola-Bibiane Schönlieb in the Cambridge Image Analysis group at DAMTP, University of Cambridge. We collaborate with Dr Yinhai Wang and the Quantitative Biology group at AstraZeneca.

EDUCATION

Cambridge Image Analysis Group, DAMTP, University of Cambridge

2018 - 2022

Ph.D. Candiate

Supervisors: Professor Carola-Bibiane Schönlieb, Dr. Yinhai Wang

Natural Sciences - Physics, University of Cambridge

2017 - 2018

Master of Science (MSci), Part III

Research Project: Machine Learning Tools for Predicting Cognitive Health with Professor Zoe Kourtzi

Director of Studies: Professor Pietro Cicuta

Natural Sciences - Physics, University of Cambridge

2014 - 2017

Bachelor of Arts (BA), Part II

Projects: Computational, Experimental
Director of Studies: Professor Mark Warner

EXPERIENCE

AstraZeneca January 2019 -

Quantitative Biology research group

Bank of America Merrill Lynch

June 2017 - August 2017

Summer Analyst. Equities electronic trading, portfolio and ETF trading

BNP Paribas June 2016 - September 2016

Summer Analyst. Automated market making, fixed income flow trading

Isaac Physics August 2013 - September 2014

Content creator at https://isaacphysics.org/

PUBLICATIONS AND PREPRINTS

Self-Supervised Learning of Phenotypic Representations with Weak Labels arXiv Preprint (2022).

Jan Cross-Zamirski, Elizabeth Mouchet, Guy Williams, Carola-Bibiane Schönlieb, Riku Turkki & Yinhai Wang

https://arxiv.org/abs/2209.07819

Label-Free Prediction of Cell Painting from Brightfield Images

Sci Rep 12, 10001 (2022).

Jan Cross-Zamirski, Elizabeth Mouchet, Guy Williams, Carola-Bibiane Schönlieb, Riku Turkki & Yinhai Wang

https://www.nature.com/articles/s41598-022-12914-x

SELECTED AWARDS

UKRI-BBSRC DTP Studentship Award

2018 - 2022

Fully Funded Ph.D. studentship from the BBSRC, supported by AstraZeneca.

Total award value: £100,000

Hawks Charitable Trust Recipient

2019 - 2022

Awarded anually for academic and sporting excellence while competing for CUCC and CUAC.

Total award value: £1000

Corpus Project Prize for Natural Sciences (Physics)

2018

For those in their final year who achieved first-class marks for a dissertation or project

Full Blue 2018 - 2021

Cambridge University Cricket Club (CUCC).

Full Blue and First Class debut

Academic Scholar 2006 - 2013

Academic Scholar at the Perse School

TALKS AND CONFERENCES

AstraZeneca PhD Student Symposium

April 2021

Presented Poster

CytoData2020 October 2020

Attendee

MICCAI 2020 October 2020

Attendee

MedTech Boost - Cambridge MemTech

September 2019

Awarded prize for the best impact on healthy ageing with innovative solutions for early detection of dementia.

TEACHING

Undergraduate Supervisor

2019 - 2020

Natural Sciences Tripos, University of Cambridge.

Supervised the Mathematical Biology course at Jesus College and St. Catharine's College.

Freelance Tutor 2014 -

A-Level Mathematics and Physics, university admissions tutoring,

English as a Foreign Language (TEFL).

EXTRA INFORMATION

Languages Python, Matlab, R.

Packages PyTorch, Keras, Pandas, SciPy, NumPy

Software CellProfiler, ImageJ, MRIcron