

# JAN CROSS-ZAMIRSKI

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## SUMMARY

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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

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**Cambridge Image Analysis Group, DAMTP, University of Cambridge** 2018 - 2022

Ph.D. Candidate

*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

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**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

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**Self-Supervised Learning of Phenotypic Representations with Weak Labels**

*Preprint* (2022).

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

<https://github.com/crosszamirski/WS-DINO>

**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

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### 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 annually 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

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### 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

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### 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

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### Languages

Python, Matlab, R.

### Packages

PyTorch, Keras, Pandas, SciPy, NumPy

### Software

CellProfiler, ImageJ, MRICron