

ANDREI MARGELOIU

andrei.margeloiu@gmail.com, +44 7784267054

Cambridge PhD student in Computer Science with ML research experience (NeurIPS 2020 Workshop), two internships in the USA, and multiple prizes in international programming contests (World Finalist in Google HashCode, Bronze medal in ACM-ICPC, three Gold medals in Computing Olympiads).

EDUCATION

University of Cambridge Oct 2020 - 2023 (expected)
PhD in Computer Science (Machine Learning)

- Artificial Intelligence Group, supervised by Mateja Jamnik and Adrian Weller.
- Research interests: ML in Medicine, Computational Biology, Graph Neural Networks, Explainable AI.

University of Cambridge Oct 2019 - Jun 2020
MPhil in Advanced Computer Science Distinction

- MPhil thesis: *Interpreting Robust Convolutional Neural Networks in Medicine* supervised by Mateja Jamnik and Adrian Weller.

University College London Sep 2016 - Jun 2019
BSc in Computer Science First-Class Honours

- Ranked 1st in the first-year, 2nd in the second-year.
- BSc thesis: *AI-based System for Automating Financial Regulation* supervised by Philip Treleaven.

WORK EXPERIENCE

Quantcast — San Francisco, USA Jun - Aug 2019
Software Engineer Intern

- Quantcast is one of the world's largest analytics company, using machine learning at scale to extract actionable insights for publishers and advertisers.
- Researched the feasibility of building a large-scale system for providing marketing funnel insights.

Quantcast — San Francisco, USA Jun - Sep 2018
Software Engineer Intern

- Developed a scalable system inside a Kubernetes cluster that securely stores and provides secret keys to a map-reduce scheduling platform processing millions of events.

University College London, Financial Computing Centre Jun - Sep 2017
Research Intern

- Alongside the UK Financial Conduct Authority, I researched ways to represent financial legislation in a machine-executable format and proposed a novel way to represent financial legislation as a graph.
- The research achieved its goal and enabled the team to obtain additional funding.

PUBLICATIONS

1. Margeloiu A., Simidjievski N., Jamnik M., Weller A., *Improving Interpretability in Medical Imaging Diagnosis using Adversarial Training*, **NeurIPS 2020** Workshop: Medical Imaging Meets NeurIPS.

ACHIEVEMENTS AND AWARDS

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| Bloomberg CodeCon Global Finalist | 2018 |
| Top 3 Romanian undergraduate student in Europe · Awarded by the Romanian League of Students Abroad. | 2018 |
| Best Romanian student in the UK · Awarded by the Romanian Ambassador in the UK to only one undergraduate student. | 2017 |
| Best first-year student in the entire UCL Engineering Faculty · Received <i>UCL Faculty Undergraduate Scholarship for Excellence</i> | 2017 |
| Google HashCode World Finalist · Led the youngest team who qualified for the World Finals (top 2%) of the largest team-based algorithm competition organized by Google. | 2017 |
| Bronze Medal in ACM-ICPC NW-Europe · Led a team of three and won a Bronze medal (top 2%) in the largest algorithm competition in North-Western Europe. | 2016 |
| Triple Gold Medalist in the Computing Olympiad · Ranked 2 nd and twice 4 th in the National Computing Olympiad of Romania. | 2013, 2015, 2016 |
| Ranked 1st in the National Computing Olympiad Online of Romania | 2014 |

LEADERSHIP

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| Student Representative in the Faculty Board University of Cambridge, Department of Computer Science | Oct 2019 - Jun 2020 |
| Director of Venture Capital Fund UCL Entrepreneurs Society · Managed a student-run VC fund of four executives and invested \$12,000 equity-free in student startups. · Funded Rice Inc, who later won the \$1,000,000 Hult Price, offered by Bill Clinton. | Jun 2018 - May 2019 |
| Microsoft Student Partner | Jul 2017 - Sep 2018 |

SELECTED PROJECTS

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| Neural Style Transfer in the Gradient Domain · Proposed a novel method for creating realistic stylised selfie-images. |
| Generative Models with Disentangled Representations · Investigated ways to disentangle the latent representation of a high-quality generative model. |
| Syntactic Neural Model for Code Completion Created and Instructed an Online Programming Course · Created an online video programming course " Introduction to Algorithms and Data Structures in C++ " with 80,000+ students from 160 countries enrolled. |
| The Truth behind Success - Youtube Vlog · Created 40+ videos about the truth behind success: " Time is your single competitor ", " Just work and luck will come ", " Success comes from beating the animal within you ". |

SKILLS

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| Technologies | Pytorch, Tensorflow, scikit-learn, Apache Spark, Kubernetes |
| Languages | Python, Java, Matlab, C, C++, Haskell, Javascript, SQL |
| Spoken Languages | English, Romanian |