Mihaela Cătălina Stoian

mihaela.stoian@cs.ox.ac.uk

EDUCATION University of Oxford

October 2021 - present

Oxford, UK

DPhil student in Computer Science Supervised by Prof. Thomas Lukasiewicz

Research areas: Neuro-symbolic AI, Machine Learning, Generative modelling.

The University of Edinburgh

September 2014 - May 2019

Edinburgh, UK

Master of Informatics with Honours, First Class

EXPERIENCE Research Intern at FiveAI

2020 - 2021

Oxford, UK

Supervisor: Dr. Tommaso Cavallari

Topic: Detecting Reflective Symmetries in 3D Models, Computer Vision

Patent application and paper: Recurrently Estimating Reflective Symmetry Planes from Partial Pointclouds (arXiv 2021, presented at the CVPR 2021 Workshop on 3D Vision and Robotics)

Research Assistant at The University of Edinburgh

2019

Supervisor: Prof. Sharon Goldwater

Topic: Speech-to-Text Machine Translation

 $Publication: \ Analyzing \ ASR \ pretraining \ for \ low-resource \ speech-to-text \ translation \ (in \ pretraining \ pretrai$

Proc. of ICASSP 2020).

Class Tutor at The University of Edinburgh

2017 - 2019

Courses: Processing Formal and Natural Languages; Discrete Mathematics; and Algorithms, Data Structures and Learning.

Student Summer Research Fellow at ETH Zurich

2018

Supervisors: Prof. Martin Vechev, Assistant Prof. Dana Drachsler Cohen

Topic: Program Behaviour Synthesis

LFCS Research Intern at The University of Edinburgh

2017

Supervisor: Prof. Kousha Etessami Topic: Branching Markov Processes

SELECTED PUBLICATIONS

Mihaela C. Stoian, Salijona Dyrmishi, Maxime Cordy, Thomas Lukasiewicz, and Eleonora Giunchiglia.

How Realistic Is Your Synthetic Data? Constraining Deep Generative Models for Tabular Data, in Proc. of ICLR 2024.

Mihaela C. Stoian, Eleonora Giunchiglia, and Thomas Lukasiewicz.

Exploiting T-norms for Deep Learning in Autonomous Driving, in Proc. of NeSy 2023.

Eleonora Giunchiglia, Mihaela C. Stoian, Salman Khan, Fabio Cuzzolin, and Thomas Lukasiewicz.

ROAD-R: The Autonomous Driving Dataset with Logical Requirements, in Machine Learning, May 2023.

Mihaela C. Stoian, Sameer Bansal, and Sharon Goldwater.

Analyzing ASR pretraining for low-resource speech-to-text translation, in Proc. of ICASSP 2020.

OTHER ACTIVITIES Organiser for the ROAD++: The Second Workshop & Challenge on Event Detection for Situation Awareness in Autonomous Driving, hosted by ICCV 2023

Organiser for the ROAD-R 2023: the Road Event Detection with Requirements Challenge, hosted by NeurIPS 2023

Reviewer for conferences and workshops: ICPR 2020, ROAD++ workshop hosted by ICCV 2023, RepL4NLP workshop hosted by ACL 2022, NeSy-GeMs hosted by ICLR 2023, NeSy 2023, survey track of IJCAI 2024

Reviewer for journals: Machine Learning

Google CodeU Program 2016

AND GRANTS

SCHOLARSHIPS EPSRC Scholarship for doctoral studies

October 2021 - March 2025 May 2023, February 2024

St Hilda's College Travel for Research Grant

TOPICS

Neuro-symbolic AI Generative Modelling

Computer Vision, 3D Shape Completion

Speech Processing, Neural Speech-to-Text Machine Translation