Sotirios Stamnas

D2.14 Zeeman Building – University of Warwick – Coventry, UK GitHub | LinkedIn | Homepage | Google Scholar

EDUCATION

PhD in Mathematics of Real-World Systems (MathSys) | University of Warwick | September 2023 - Present

- Research focus: Detecting Deepfakes and Synthetic Media for Multimedia Forensics
- Supervisors: Prof. Victor Sanchez and Prof. Vitomir Struc

MSc in MathSys (Distinction) | University of Warwick

September 2022 - September 2023

• Research: Fairness in Multi-Objective Reinforcement Learning, supervised by Prof. Paolo Turrini and Ann Nowe

Master of Physics (1st Class) | The University of Manchester

September 2018 - June 2022

• Master's project: Applications of Statistical Physics to Epidemiology, supervised by Prof. Tobias Galla

• Research: Simulating the Wealth Distribution in Societies, supervised by Prof. Panos Argyrakis

TEACHING EXPERIENCE

Graduate Teaching Assistant | University of Warwick

September 2023 - Present

CS342 Machine Learning, CS255 Artificial Intelligence, CS131 Mathematics for Computer Scientists 2

Publications

- DiffFake: Exposing Deepfakes using Differential Anomaly Detection. Sotirios Stamnas, Victor Sanchez. In IEEE/CVF Winter Conference on Applications of Computer Vision Workshops (WACVW), 2025. [link]
- DecepTIV: A Large-Scale Benchmark for Robust Detection of T2V and I2V Synthetic Videos. Sotirios Stamnas, Victor Sanchez, Vitomir Struc. Under review: NeurIPS Datasets and Benchmarks, 2025. [link]

AWARDS AND FUNDING

- EurAI travel grant to attend the ESSAI & ACAI Summer School, University of Ljubljana, 2023
- EPSRC MSc and PhD studentship at MathSys II CDT, University of Warwick, 2022
- 1st place in the AI Sponsor challenge organized by fuzzylabs.ai, part of the GreatUniHack Hackathon, 2020
- 2nd place in the Game Development challenge, part of the *GreatUniHack* Hackathon, 2020

SELECTED TALKS

Junior Applied Maths Seminar (JAMS) | University of Oxford

June 2025

Talk: DecepTIV: A Large-Scale Benchmark for Robust Detection of T2V and I2V Synthetic Videos

AI4MFDD Workshop, WACV 2025 | JW Marriott, Tucson, Arizona

February 2025

Talk: DiffFake: Exposing Deepfakes using Differential Anomaly Detection

Additional Activities

- SPAAM seminar organizer, 2025-Present
- Student Staff Liaison Committee (SSLC) representive 2022-Present
- Executive committee of Warwick Piano Society, 2025-Present

SKILLS

- Programming Languages & Tools: Python, C++, Julia, PyTorch, Scikit-learn, NumPy, SciPy, Pandas, Matplotlib, OpenCV, Transformers, Diffusers, Gym, Git, LaTeX, ffmpeg
- Technical: High-Performance Computing (HPC) clusters, CUDA, Microsoft Azure, Linux systems, SLURM job scheduling, Python virtual environments (venv, conda), API integration