

# Anastasios Stamoulakatos

## Research Associate

### Professional Experience



**Research Associate**, CMAC Future Manufacturing Research Hub, Glasgow,  
April 2022 - Present

- Improved decision-making in medicines manufacturing by developing machine learning models that correlate particle microscopy data with bulk powder properties
- Presented monthly to stakeholders from AZ, UCB, Takeda, Pfizer, Roche, Lilly
- Acquired and analysed data from CMAC lab and industrial partners
- Developed GUI with deployed models that can be used by non-technical lab personnel

**Part-time Machine Learning Engineer**, National Manufacturing Institute Scotland, Glasgow,  
November 2021 - March 2022

- Accelerated manufacturing by developing and deploying a deep learning model for real-time bolt detection

**Research Assistant**, University of Strathclyde, CIDCOM, Glasgow,  
October 2018 - December 2021

- Developed image and video recognition models using CNNs and RNNs to automate the visual inspection of subsea pipeline surveys
- Presented monthly to stakeholders from N-Sea
- Developed deep learning algorithms for automating visual inspection processes for cargo transportation and for identification of asbestos fibres in air samples
- Worked on domain adaptation, GANs, image and video augmentation, object detection and instance segmentation

**Teaching Assistant**, University of Strathclyde, Glasgow  
October 2018 - April 2022

- Assisted 2nd year students in C++ lab exercises and final project
- Taught fundamentals of coding and object oriented programming

### Relevant Skills

- Python, C++, SQL, Unix Bash
- PyTorch, Scikit-learn, Pandas, NumPy, SciPy, Seaborn
- Apache Spark, Azure, Git

### Contact Info

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### Education

Ph.D. in Electronic and Electrical Engineering  
**Institution:** University of Strathclyde, Glasgow,  
October 2018 - Present

**Thesis:** Automatic Annotation of Subsea Pipeline Surveys using Deep Learning

**Industrial Partner:** N-Sea

M.Eng. in Electrical and Computer Engineering  
**Institution:** National Technical University of Athens, October 2012 - March 2018

**GPA:** 7.97/10

**Thesis:** Causality Plane (wavelet entropy - complexity) of ultrasound images of atheromatous plaque and Classification of their symptomacy using machine learning

### Languages

Greek (Native)  
English (Professional)  
French (B2)  
Spanish (Basic)

### Publications

- Evaluating Style-Content Factorisation Capability of Image Comparison Metrics (To be submitted to Journal of Imaging)
- A Comparison of the Performance of 2D and 3D Convolutional Neural Networks for Subsea Survey Video Classification, OCEANS 2021
- Automatic annotation of subsea pipelines using deep learning. MDPI Sensors

### Interests

Competing in triathlon races, hiking, guitar playing, chess