JOANNE LIN

+447534384732 ⋄ https://https://joannelin168.github.io/ ⋄ joanne.lin@bristol.ac.uk

PROFILE

I am a PhD Candidate in Computer Science at the University of Bristol, funded by the MyWorld Strength in Places programme. My field of research focuses on segmentation and tracking in low-light video conditions, with an expected completion date of September 2027. I hold a First-Class Honours BSc in Computer Science from the University of Bristol. My current research interests include computer vision, image/video processing, generative AI, and machine learning.

EDUCATION

PhD Computer Science   2023 - 2027
University of Bristol, Currently studying

BSc Computer Science   2020 - 2023
University of Bristol, Award: First class (with Honours)

PROJECTS

Segmentation and Tracking in Low-Light Videos   Sep 2023 - Ongoing
PhD Research

· Developing novel solutions for segmentation and tracking in low-light videos to assist creators in the creative industries.
· Exploring end-to-end methods to remove the need for enhancement and allow seamless segmentation in low-light videos.

Counting Great Apes using Deep Learning   Jan 2023 - May 2023
Undergraduate Project

· Explored and evaluated a variety of traditional tracking algorithms to 'stitch' the detections made from a pre-existing great ape detector.
· Explored the possibility using a single deep-learning network to count the number of great apes in a video clip.

PUBLICATIONS

Multi-Scale Denoising in the Feature Space for Low-Light Instance Segmentation   Mar 2025
IEEE International Conference on Acoustics, Speech, and Signal Processing   *ICASSP 2025*

· Developed a novel weighted non-local block module for integration into standard instance segmentation backbones, enhancing robustness in low-light imaging scenarios.
· Conducted extensive evaluations across multiple instance segmentation architectures
· Demonstrated superior performance compared to conventional two-stage pipelines that enhance the images as a pre-processing step.

INTERNSHIP/TRAININGS

Internship – Outfield Technologies, Remote.   Jul 2023 - Aug 2023
Internship - MAC Clinical Research, Remote.   Jun 2022 - Sep 2022

POSITION OF RESPONSIBILITY

Teaching Assistant, University of Bristol.   Oct 2021 - Ongoing
Computer Science Course Representative, University of Bristol.   Nov 2020 - Jun 2023