MIUA 2025
29th Medical Image Understanding and Analysis Conference

Call For Papers

MIUA 2025 Special Session: **"Frontiers in Computational Pathology"**

We invite submissions of high-quality papers and abstracts for the MIUA 2025 Special Session on **"Frontiers in Computational Pathology"**. This session will explore groundbreaking advances in computational pathology, a field transforming the diagnosis, prognosis, and treatment of diseases through the integration of artificial intelligence (AI) and the digitisation of tissue slides. For more details see our website here.

Scope and Topics

This session aims to bring together researchers, clinicians, and industry professionals to share insights, challenges, and innovations at the forefront of computational pathology. Topics of interest include, but are not limited to:

- Histology image classification
- Semantic segmentation in histology images
- Object detection in histology images
- Whole Slide Image (WSI) analysis
- AI-assisted diagnosis and prognosis
- Biomarker discovery and validation
- Survival analysis through WSIs
- Gene expression prediction and analysis
- Integration of computational pathology into clinical workflows
- Personalised medicine through computational pathology
- Generative AI in computational pathology
- Novel algorithms for domain generalisation and robustness
- Low-resource AI solutions for pathology
- Algorithmic fairness and ethical considerations in pathology
- Multimodal AI solutions

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Submission Details

Important Dates:

- Full paper submission deadline: 11:59 GMT, 24th March 2025
- Abstract submission deadline: 11:59 GMT, 12th May 2025

Submission Types:

- **Full Papers:** Length between 8 and 15 pages (using the LNCS template) showcasing original research contributions. Accepted papers will be published as MIUA Proceedings by the Springer Publishing Group.
- **Abstracts:** Up to 3 pages (excluding references, 1 column – the LNCS template) providing proof-of-concept research or ongoing work. Accepted abstracts will be published as an eBook (TBD).

All submissions will undergo peer review. Authors are encouraged to submit supplementary material as per LNCS guidelines. Please submit your paper/abstract through the MIUA2025 CMT. ***Please then select the special session option***. ***Click here to submit***.

Why Submit?

This session provides a platform to present cutting-edge research, network with experts in the field, and contribute to shaping the future of computational pathology. Submissions from typically underrepresented groups are particularly encouraged, fostering diversity, fairness, and inclusion within the MIUA community.

Organisers

- Dr Adam Shephard, Tissue Image Analytics Centre, Department of Computer Science, University of Warwick, Coventry, UK.
- Prof Nasir Rajpoot, Tissue Image Analytics Centre, Department of Computer Science, University of Warwick, Coventry, UK.
- Mr Mostafa Jahanifar, Tissue Image Analytics Centre, Department of Computer Science, University of Warwick, Coventry, UK.
- Mrs Neda Zamanitajeddin, Tissue Image Analytics Centre, Department of Computer Science, University of Warwick, Coventry, UK.

Join us in exploring how computational pathology is redefining the landscape of medical imaging and healthcare!