

## MONASH BIOMEDICAL IMAGING 2021 WEBINAR SERIES

**DATE: THURSDAY 11 MARCH 2021**

**TIME: 12:30 – 1:15PM**

**ZOOM WEBINAR**

### **Embedding is all you need: A machine learning way to analyse white matter tractography streamlines**

Embedding white matter streamlines with various lengths into fixed-length latent vectors enables users to analyse them with general data mining techniques. However, finding a good embedding schema is still a challenging task as the existing methods based on spatial coordinates rely on manually engineered features, and/or labelled dataset. In this webinar, Dr Shenjun Zhong will discuss his novel deep learning model that identifies latent space and solves the problem of streamline clustering without needing labelled data.

### **Application of artificial intelligence in correcting motion artifacts and reducing scan time in MRI**

Magnetic Resonance Imaging (MRI) is a widely used imaging modality in clinics and research. Although MRI is useful it comes with an overhead of longer scan time compared to other medical imaging modalities. The longer scan times also make patients uncomfortable and even subtle movements during the scan may result in severe motion artifact in the images. In this seminar, Dr Kamlesh Pawar will discuss how artificial intelligence techniques can reduce scan time and correct motion artifacts.

**Register for this Zoom webinar** at:

[monash.zoom.us/webinar/register/9516130079751/WN\\_b4yfLJb3S7q9FoTtGycdrplatforms.monash.edu/mbi](https://monash.zoom.us/webinar/register/9516130079751/WN_b4yfLJb3S7q9FoTtGycdrplatforms.monash.edu/mbi)



**Dr Shenjun Zhong** is a Research Fellow and Informatics Officer at Monash Biomedical Imaging. His research interests are sequence modelling, reinforcement learning and federated learning in the general medical imaging domain.

**Dr Kamlesh Pawar** is a Research Fellow at Monash Biomedical Imaging. His research interest includes deep learning, MR physics, MR image reconstruction and computer vision.

For more information please contact:

**E:**  
[enquiries.mbi@monash.edu](mailto:enquiries.mbi@monash.edu)

**Or visit our website:**  
[platforms.monash.edu/mbi](https://platforms.monash.edu/mbi)