

Visual Computing Magazine

The Preface

Welcome to the second issue of Visual Computing Magazine, where we are proud to showcase the exceptional talents of Masters and Bachelors students who are pushing the boundaries between visual computing and artificial intelligence. In this issue, we are delighted to present a remarkable collection of cutting-edge research and innovation that spans diverse disciplines from computer vision to medical imaging.

This issue begins with "Road object detection and distance estimation using a monocular depth model" presented by Baroud Yasmine et al., who proposed two approaches for the detection of small road objects and the estimation the distance between the detected objects and the vehicle.

Advancing Healthcare Diagnosis, "Classification of suspected lung nodules based on AI approaches" by Y. Aghiles Koulal et al. is an essential contribution. By employing advanced AI models, the authors aim to provide automated analysis of lung nodules, enabling early detection of lung pathologies and improving patient care.

Empathy meets innovation with "Object Recognition System on a Tactile Device for Visually Impaired" by A. Souayah et al. Through their work, they illuminate a path toward a more inclusive world by developing a tactile device that enables visually impaired individuals to perceive and interact with their surroundings.

In the realm of sports analysis, "Recognition and Analysis of Sports Actions in Real-Time Video" by M. H. Diab. et al. takes the center stage. Their real-time video analysis opens up exciting possibilities for sports enthusiasts, coaches, and analysts to gain deeper insights into athletic performance.

"Towards a New Data Representation: GANs for Medical Images Segmentation" by K. Aoucher et al. investigates an innovative approach of exploiting generative adversarial networks (GANs) for a few-step learning of lung tumor segmentation models..

Thanks to the power of deep learning, Y. Hanafi et al. in "Melanoma Identification Using Deep Learning" offers a reliable way to identify melanoma, furthering advances in early detection and prognosis.

Finally, we delve into the foundations of visual object recognition with "The ImageNet Dataset Designed for Use in Visual Object Recognition" by Slimane Larabi. As a testament to the importance of comprehensive datasets, this study sheds light on their crucial role in advancing the field of computer vision.

Chief Editor: Prof. Slimane LARABI

