

**ICRERA 2025**

**14th INTERNATIONAL CONFERENCE ON RENEWABLE  
ENERGY RESEARCH AND APPLICATIONS**

**Assoc. Prof. Dr. Niko Lukač**

University of Maribor, Slovenia



**Paper ID** \_\_\_\_\_ : 165

**Paper Title** \_\_\_\_\_ : GPU-accelerated Sparse Voxel Octree for irradiance simulation using remote sensing data

**Bio :**

Niko Lukač is currently an Associate Professor of computer science with the University of Maribor, Slovenia. His research in 3D point cloud processing, GeoAI, environmental modeling, and parallel computing has led numerous national and international research and development projects with publications in high-ranking journals, and he has assumed editorial roles in various scientific journals. From 2019 to 2022, he was an Executive Committee Member of the prominent European Umbrella Organization for Geographic Information (EUROGI). He is also active as an Evaluator to the EC and the University of Maribor honoured him for his exceptional research achievements, in 2024.