International Journal of Automation Technology (IJAT) Call for Papers:

Special Issue on Advanced Three-Dimensional Digital Geometry Processing

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In the fields of design, manufacturing, social infrastructure, and medicine, it has become possible in recent years to create large-scale 3D digital data that represent the geometry of various types of objects. These data are obtained from high-performance 3D measurement systems, such as laser measurement and CT. However, to effectively deploy such digital data for design, manufacturing, maintenance, simulation, diagnosis, inspection, or other applications, it is essential to have geometric processing technologies that appropriately and efficiently convert and process, according to the application, the volume, resolution, representation format, semantic attributes, etc. of the 3D digital data. This special issue solicits papers on the fundamentals and applied research of such advanced digital geometric processing techniques. Papers are welcome on the following or other related topics:

3 D measurement (CT, laser scanning, photogrammetry, etc.), point cloud processing, volume data processing, meshes, finite element analysis and discretization issues, virtual and augmented reality, reverse engineering, digital/virtual prototyping, digital style/industrial design, advanced algorithms for CAD/CAM, digital geometry processing for additive manufacturing and 3D printing, solid and heterogeneous modeling, hardware acceleration, 3D object recognition/archival/retrieval, CAD in the arts and creative media, Internet-based/Web-enabled design and engineering, machine/deep learning techniques related to these topics, other traditional and emerging topics of three-dimensional digital geometry processing, standardization, and educational applications.

*Speedy Review (1-2 months for the first review) *IJAT is indexed in ESCI; Scopus; Compendex (Ei-Index); DOAJ

