



SRINIVAS UNIVERSITY

Mangalore-575001, Karnataka (India)
Srinivas Centre for Research in 3D Visualization



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Objective:

Exploring and studying developments in 3D image visualization in an area such as Augmented Reality, Virtual Reality, etc.

Description:

The Visualization Research Center has an excellent scope in all areas such as IT, Construction Industry, but the primary issue is all sectors are using commercial software. Which customer must purchase to use it and its validity (Product Key) is limited. The idea here is to use open-source software to develop such visualization software which can be used every day and anywhere without restriction. The concept here is to use Open source software to create such visualization software that can be used every day and anywhere without restrictions. The research implemented using Visualization Toolkit (VTK) and MFC (VC++) is capable of reading the file formats like-.OBJ, WRL, STL, STEP, IGES and 3D scenes can be rendered with an inclusion of the properties viz. applying various Lights, Material Colour, and Options for Solid, Wireframe, Points and Transparency viewing, Texture Mapping, Transformation, Walkthrough, Cut Sections, Background colour selection, Background and Base image selection, Mark up features such as Sealing and Measurements, Different camera views, Parts selection and deletion, Copying the rendered object to the clipboard and enabling to view more than one models through multiple tabbed windows. Stereovision feature has been added to this software, which gives better 3D visual effect using 3D Glasses at a lower cost.

Publications:

Journal:

The year 2018

- Nayak, Mangesh. (2018). Visualization of CAD and CAE Files using VTK and MFC. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 3(1), 18-24. DOI: <https://doi.org/10.5281/zenodo.1163159>.

Conference:

- Mangesh Nayak, Shylesh Prabhu, Chaitra Impact of Augmented Reality Technology
“Emerging Areas of IT Applications in Management, Education and Social Sciences” ISBN
No.: 978-81-938040-5-6, pp239-244.

Working Papers:

- Augmented Reality
 - Exploring the Influence of Augmented Reality Technology in Business World.
 - Exploring the Influence of Augmented Reality Technology in Education.
 - Impact of Augmented Reality Technology.
 - Exploring the area Of Artificial Intelligence
- Virtual Reality

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