

An Indian-Australian research partnership

<b>Project Title:</b>	<b>Design of Guidelines and Grammar for Storytelling in Virtual Reality</b>	
<b>Project Number</b>	ID00711	
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### Research Clusters:

### Research Themes:

Highlight which of the Academy's CLUSTERS this project will address? <i>(Please nominate JUST <b>one</b>. For more information, see <a href="http://www.iitbmonash.org">www.iitbmonash.org</a>)</i>		Highlight which of the Academy's Theme(s) this project will address? <i>(Feel free to nominate more than one. For more information, see <a href="http://www.iitbmonash.org">www.iitbmonash.org</a>)</i>	
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2	Energy, Green Chem, Chemistry, Catalysis, Reaction Eng	2	Infrastructure Engineering
3	Math, CFD, Modelling, Manufacturing	3	Clean Energy
4	CSE, IT, Optimisation, Data, Sensors, Systems, Signal Processing, Control	4	Water
5	Earth Sciences and Civil Engineering (Geo, Water, Climate)	5	Nanotechnology
6	Bio, Stem Cells, Bio Chem, Pharma, Food	6	Biotechnology and Stem Cell Research
7	Semi-Conductors, Optics, Photonics, Networks, Telecomm, Power Eng		
8	HSS, <b>Design</b> , Management		

## The Research Problem

With developments in the hardware technologies in the last few years, Virtual Reality (VR) has clearly began penetrating into common man's life. This has created an immediate need and interest for VR content in order to catch up with these advancements. The content creation technologies and software have also become easily accessible to people. Professionals as well as amateur artists and designers have started exploring the possibilities of storytelling. Unlike the cinema that evolved over a century with strongly defined grammar, rules, techniques and theories, VR is a new platform for us, which demands a slightly different set of expertise. Thus for a VR experience designer it is essential to study the underlying grammar of storytelling and narrative in a 360° space that would surround us.

## Project aims

If one can study and understand the sense of presence in a 3D immersive environment with respect to storytelling, a set of guidelines for optimum VR experience can be developed. Therefore, the primary objectives are to understand the grammar for content creation in VR and to propose guidelines for optimum VR experiences in future.

This research work would help future creators of VR applications in developing compelling experiences that would evoke the most effective presence.

## Expected outcomes

A detailed report on 'Guidelines & Grammar for Optimum VR Experience' would be developed. Accordingly, a VR based experience would be created with regard to the proposed guidelines, which will help test and validate them.

## How will the project address the Goals of the above Themes?

The guidelines created would help in creating better storytelling possibilities within any virtual environment. VR being capable of catering to multiple domains beyond entertainment, would help extend the research to other fields.

## Capabilities and Degrees Required

A background in design or architecture; with preferable focus on interaction design, visual communication, interactive storytelling, 3D gaming or virtual reality is desired.

## Potential Collaborators

Tata Elxsi: Animation and VFX, Film Production Companies exploring 360° films / Cinematic VR,  
Nokia Ozo

Select up to **(4)** keywords from the Academy's approved keyword list (**available at [www.iitbmonash.org](http://www.iitbmonash.org)**) relating to this project to make it easier for the students to apply.

Design, Virtual Reality, Presence, 360° Narrative