SERB-INAE Conclave on 'SERB Digital Gaming Research Initiative'

The event started with an Inaugural session wherein Prof Sandeep Verma, Secretary, SERB during his address highlighted the research initiative in gaming and how digital gaming can make a difference in learning patterns in education and efforts for making indigenous leisure gaming platforms. Subsequently, Prof Indranil Manna, President, INAE during his address gave an introduction about INAE and brief on Gaming industry status in India. He also emphasised on collaboration of Academia and industry in this initiative. The Inaugural session concluded with an address by Prof Santanu Chaudhury, Director, IIT Jodhpur. During his address, he highlighted technologies available and research in the field of gaming in India. The opening session was started by Dr Shailja Vaidya Gupta, Sc 'G', DBT & Formerly Senior Adviser, Office of PSA. She briefed on the need for indigenous games and statistics on the usage of different platforms in India. Sh. Vipin Sondhi, Chairman, CII National Committee and Mission on Technology, Innovation and Research gave insights of CIIs involvement in the gaming industry and the limitations of the industry and how academia and industry can work hand in hand for making a robust indigenous platform.

Left to Right: Dr Sandeep Verma, Prof Indranil Manna and Prof Santanu Chaudhury in Opening Session

Opening Session in Progress

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Subsequently, three sessions were organised namely R&D in Learning, Educational, and Leisure Online Gaming Platforms; Digital Game Design with a focus on Indian Culture & Values and Development of Indigenous Technology platforms and applications.

Session I: *R&D in Learning, Educational, and Leisure Online Gaming Platforms*
Prof. Kavita Vemuri, IIIT Hyderabad moderated the session and Prof. G. Nagarjuna, Former Professor and Principal Investigator of gnowledge lab, HBCSE, TIFR, Dr Sandeep Athavale, Lead Scientist, TCS Research and Innovation, Ms. Shruti Verma, Business Lead -India/SEA, Epic Games deliberated on the application of Digital games in *Learning and Education*.

Part I- Digital games in Learning and Education

The second part of the discussion was focused on *Leisure games* where the major deliberation on developing games from Indian epics, stories, building game assets, skills required, and the development & integration of Indian language & speech engines were held. Mr. Harish Chengaiah, Founder, Game Director and Producer, Outlier Games; Mr. Vaibhav Chavan, Founder and CEO, underDOGS Gaming Studio; Mr. Chirag Chopra, Founder & Creative Director, Lucid Labs and Mr. Lokesh Suji, Director, Esports Federation of India also participated in this session.

Part II- Leisure games

Session II: *Digital Game Design, with focus on Indian Culture & Values*
Prof Nitin Gupta, IIT Kanpur moderated the session and participated by Dr. Kavita Vemuri, IIIT Hyderabad, Dr. Avinash Sharma, IIIT Hyderabad and Mr. Rahul Sehgal, Founder and MD, Roach Interactive. The deliberations were focused on technical challenges in the following aspects:

- Reconstruction of human body movement with oriental clothing.
- Problem in Realistic and 3D figure generation.
- Dearth of structured game design course and lack of proper mentoring.
- Lack of understanding of human behaviour.
- How to involve industry into games which are developed in academic labs.

Session II- Digital Game Design, with focus on Indian Culture & Values

Session III: *Development of Indigenous Technology platforms and applications*
The session was moderated by Prof. Santanu Chaudhury, Director, IIT Jodhpur. Experts from Academia Prof. Parag Chaudhuri, IIT Bombay; Prof. Subodh Kumar, IIT Delhi and Prof. C.V. Jawahar, IIIT Hyderabad deliberated on *Technology Needs and Open Problems for developing games with Indian Ethos.* This was followed by a panel discussion on *What Technology Support is needed for developing Games with Indian Mythological and Heritage Contexts: Industry Perspective by Experts from startups, Academia and Industry.* The participants from startups were Mr. Harish Chengaiah; Mr. Vaibhav Chavan; Mr. Chirag Chopra, Mr. Rahul Sehgal. The Experts from Academia were Dr. Amit Bhardwaj, Assistant Professor, IIT Jodhpur, Dr. Uma Mudengudi, Professor, KLE Technological University, Hubli and Dr. Rajendra Nagar, Assistant Professor, IIT Jodhpur. Dr. Anupama Mallik, Founder, CEO & MD, Vizara Technologies; Mr. Ajit Padmanabh,

Founder and CEO, Who VR and Mr. Manas Bairagi, CEO, iHUB-Drishti participated as Industry representatives.

Session III- Development of Indigenous Technology platforms and applications

The conclave was successful as different dimensions of gaming research and industry perspective were discussed. The discussions were recorded for preparing recommendation for 'Call for Proposal'.