

Course Name: Computer Graphics

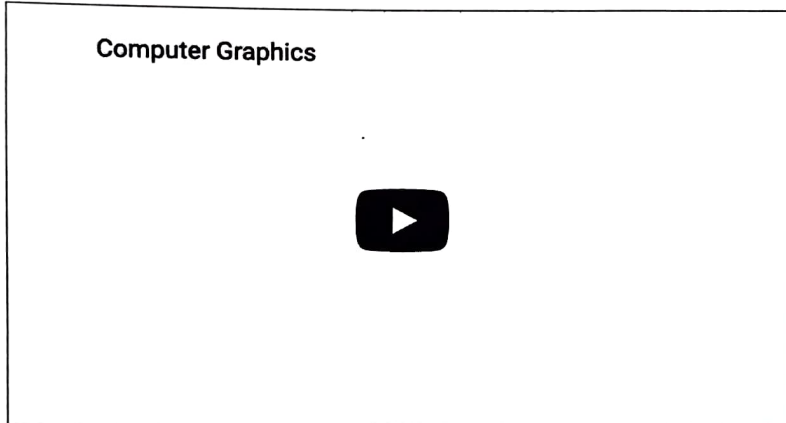
About Course

Certificate Type

Toppers list

Statistics

Feedbacks



Course abstract

Computer graphics is one of the fundamental aspects of any computing system. Its primary role is to render the digital content (0's and 1's) in a human-comprehensible form on the computer screen. The rendering follows a series of stages, collectively known as the graphics pipeline. In this course, we will introduce the pipeline and its stages. The topics covered include various object representation techniques followed by the pipeline stages of modeling transformation, 3D to 2D viewing transformation, clipping and hidden surface removal and scan conversion (rendering). We shall follow the stages of the 3D graphics pipeline. In order to complete the coverage, we shall also briefly introduce the present day graphics hardware (I/O devices, GPU) and the widely popular OpenGL graphics library

Course Instructor

 Media Object

Prof. Samit Bhattacharya

Dr Samit Bhattacharya is an associate professor in the Dept of Computer Science and Engineering, IIT Guwahati, with more than 12 years of teaching and research experience. He has taught numerous courses including those related to the proposed course, to both the PG and UG level students of Computer Science and Engineering. He also has nearly five


() dozen publications as books, book chapters, patents, peer-reviewed journals and conference proceedings under his credit. He has already graduated four PhD students (with another four at various stages of their research) and guided more than a dozen MTech projects and nearly three dozen BTech projects including those related to this area.

More info (www.iitg.ac.in/samit/)

Teaching Assistant(s)

No teaching assistant data available for this course yet

- Course Duration : Jul-Sep 2021
- View Course (<http://archive.nptel.ac.in/courses/106/103/106103224/>)
- Syllabus (/content/syllabus_pdf/106103224.pdf)
- Enrollment : 20-May-2021 to 02-Aug-2021
- Exam registration : 17-Jun-2021 to 20-Aug-2021
- Exam Date : 26-Sep-2021


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Department: Information Technology

2021-22

REPORT

NPTEL Course on “Computer Graphics”

Date of program: Jul - Sep 2021

Resource person: Prof. Samit Bhattacharya, associate professor, IIT Guwahati

About the Program:

In this npTEL course, the resource person explained that Computer graphics is a multidisciplinary field with widespread applications, shaping how we visualize and interact with digital content. It continues to evolve with advancements in hardware, software, and techniques, contributing to diverse industries and enhancing our digital experiences.

Signature of the Faculty member

Yagnasri Ashwini

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