

## Registration Fees

- IIIT Kalyani Students: INR 500
- Students/Faculty from Academic Institutes: INR 1000
- Industry persons: INR 3000

## Fees Transfer

- Account name: CONTINUING EDUCATION PROGRAMME (CEP) IIIT KALYANI
- Account Number: 40031861091
- IFSC Code: SBIN0006701

## Coordinators

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## Important Dates

Last date of registration: 16/04/2021  
Intimation to the participants: 18/04/2021  
Workshop dates: 21/04/2021 – 23/04/2021

## How to Attend

The session links will be shared with the participants in time of registration confirmation over email on 18/04/2021.



# On-line Workshop on Digital and Computational Geometry: Advancements, Applications and Challenges

April 21-23, 2021



Organized by

**Indian Institute  
of  
Information Technology Kalyani**

WEBEL IT Park, B-14, Near Buddha Park  
P.O. Kalyani, Nadia, PIN - 741235, West Bengal  
India

[www.iiitkalyani.ac.in](http://www.iiitkalyani.ac.in)

## About IIIT Kalyani

The Indian Institute of Information Technology Kalyani has been setup with an objective to produce best-in-class human resources in IT and to harness the multidimensional facets of IT in various domains. IIIT Kalyani strives to evolve into a world-class academic institution with the highest quality of education and research facilities and produce industry ready IT graduates to meet the industry demands. The institute will act as a catalyst in fostering an innovative entrepreneur-focused ecosystem to ensure that new products, solutions and IP are created in the State taking advantage of the intellectual capital of the State.

IIIT Kalyani has been set up at Kalyani, West Bengal by Government of India (MHRD), Government of West Bengal and industry partners. The institute is run by the Board of Governors of IIIT Kalyani whose members include the representatives of Government of India (MHRD), Government of West Bengal, industry partners and eminent people from academia, industry and civil society. IIIT Kalyani has been attributed the status of Institute of National Importance (INI) by the parliament of India in August, 2017.

## Theme of the Workshop

Geometric algorithms are often used in many computer applications. Digital geometry deals with discrete sets (usually discrete point sets) considered to be digitized models or images of objects in the 2D or 3D. The primary goal of computational geometry is to develop efficient algorithms and data structures for solving problems stated in terms of basic geometrical objects: points, line segments, polygons, polyhedra, etc. This workshop will provide an opportunity to the participants for getting exposed to the field of geometric algorithms. Distinguished panel of speakers will discuss on recent developments in the related areas like

conventional geometry in digital domain, 3D primitives, curves and surfaces, digital manifolds, digital topology, image applications etc. This workshop will surely benefit the participants through understanding of recent developments in the field.

Participants (faculty members, post graduate and research level students) will be enriched through discussions on classic algorithms and generic techniques for efficient organization or modeling of the recent focused problems.

## Objectives

- To enrich teaching and learning process in the field of geometric algorithms and related applications.
- Developing competency among students to understand latest trends.
- Understanding the recent challenges and open problems.
- To enhance research capacity and skills in the domain.

## Target Audiences

- Scientists, Researchers (M.Tech & PhD students), Industry Professionals, and Faculty members from various Institutes.

## Resource Persons

- Prof. Bhabatosh Chanda, ECSU, ISI Kolkata
- Prof. Partha Bhowmick, Computer Science & Engineering, IIT Kharagpur
- Prof. Arindam Biswas, Information Technology, IEST Shibpur
- Prof. Gautam K. Das, Department of Mathematics, IIT Guwahati

- Dr. Brojeshwar Bhowmick, TCS Research Kolkata, India
- Dr. Ranita Biswas, IST, Austria
- Dr. Piyush Kanti Bhunre, Techno India University, Kolkata
- Dr. Oishila Bandyopadhyay, Computer Science & Engineering, IIIT Kalyani
- Dr. Sanjoy Pratihar, Computer Science & Engineering, IIIT Kalyani

## Schedule

- 21/04/2021  
Session-1: 11.00 - 12.30  
Session-2: 14.30 - 16.00  
Session-3: 16.15 - 17.45
- 22/04/2021  
Session-1: 10.00 - 11.30  
Session-2: 14.30 - 16.00  
Session-3: 16.15 - 17.45
- 23/04/2021  
Session-1: 10.00 - 11.30  
Session-2: 12.00 - 13.30  
Session-3: 14.30 - 16.00

## Registration Procedure

- Registration link
- Confirmation to the candidates will be intimated through mail.
- The number of participants is restricted to 100.
- The participants will be selected in First-Come-First-Serve basis.
- The participants will be provided E-certificates on attending the workshop.