INDIAN INSTITUTE OF INFORMATION TECHNOLOGY ALLAHABAD
Jhalwa, Prayagraj, Uttar Pradesh-211015
ADVERTISEMENT OF INTERNSHIP PROGRAM (VRITIKA)

Applications are invited for short-term (7 weeks) research internship/training under the SERB Accelerated Vigyan Programme - Vritika titled "**Geometry of Fractal Sets and Fractal Functions**".

Objective: During the master's courses in India, the students study "smooth" functions defined on "nice" sets such as differentiable functions on intervals of the real line, rectangles in the Euclidean plane, and regular open domains in higher dimensional Euclidean spaces. In this event, the students will get exposure to fractal sets such as Cantor sets, Sierpinski triangles, and Julia sets and nonsmooth functions (sometimes nowhere differentiable functions) referred to as fractal functions. As a consequence, the students will learn the constructions of fractal sets and fractal functions, and also study fractal dimensions of these sets and functions. Further, if the students have some software skills, they can explore more by drawing some of the well-known fractals. Moreover, this internship will motivate the interns to continue their research in the related areas of Fractal Geometry.

Eligibility: Candidates currently pursuing M.Sc. or Ph.D. (preferably Ph.D. first year student) in Mathematics from University/Institution/College and having a good orientation towards scientific research may apply.

Internship Details:

1. Mode: Offline
2. Duration: 7 weeks (May 22, 2023 to July 09, 2023).
3. Certificate will be provided to the interns after the successful completion of the internship tenure (Submission of work report).
4. Nature of support:
- The internship will be given for meeting daily necessary expenses such as stationery, consumables, accommodation, food, etc.
- The participating students will also be eligible for TA reimbursement for their journey to the host institute from their hometown/home institute, both ways, as per GoI norms.
- Course Material and Lab Access will be made available during the workshop.
- Stipend: No scholarship/stipend is given.

Number of Candidates: **03**

Last date of Application: **14 May, 2023**

Note: The applicant should produce a bonafide letter from the Head of the Department indicating the current association with the Institute/University/College and No Objection Certificate allowing the student to undergo internship offline before joining the program.

Interested candidates may submit their application online before the due date through the following Google form.

https://forms.gle/ZE6dmm3JESptxLNT7 or send your complete CV on saurabhverma@iiita.ac.in

Event Organizer

Dr. Saurabh Verma

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