



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

Biomedical Imaging Laboratory (BMIL) at the Indian institute of Information Technology Allahabad, invites application for the short-term (5 weeks) research internship/training under the SERB Accelerated Vigyan Programme – Vritika, which is titled as “**The study of Photoacoustic tomography involving hands-on training of the equipment for data acquisition and image reconstruction**”.

**Objective:** A winter training program will be held at the BMIL, Indian Institute of Information Technology Allahabad from 15<sup>th</sup> December, 2023 to 19<sup>th</sup> January 2024. Photoacoustic technique is a comparatively recent imaging technique. It is a hybrid imaging modality. A biological sample containing chromophores is illuminated with short laser pulses that induce rapid thermo-elastic expansion of the tissue generating acoustic/pressure waves. The wide-band photoacoustic signals are collected by ultrasound transducers that surround the tissue in a typical PAT (Photoacoustic Tomography) setup. The captured signals are then used to produce/reconstruct the map of the initial pressure rise. PAT is capable of performing multi-functionality imaging like MRI, has much better contrast like X-ray and also has better penetration depth like Ultrasonography but not harmful like X-ray. The primary objective of this program is to make students familiar with the concept and handling of this emerging modality.

**Eligibility:** We are interested in candidates from BTech (final year)/MSc/MTech students of engineering and science backgrounds having keen interest towards learning and exploration.

**Internship Details:**

1. Mode: **Offline**
2. Duration: 5 weeks (15<sup>th</sup> December, 2023 to 19<sup>th</sup> January 2024).
3. Interns will be awarded with the certificates after submission of the work report, at the end of the training program.
4. Nature of support:
  - The internship will be given for meeting daily necessary expenses such as 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 internship.
  - Stipend: No scholarship/stipend will be given.

**Number of Candidates: 05**

**Last date of Application: 10<sup>th</sup> December, 2023**

**Announcement of Selected Candidates: 11<sup>th</sup> December, 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 by sending your complete CV at [ratank.saha@iiita.ac.in](mailto:ratank.saha@iiita.ac.in)

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