

## SCIENCE AND ENGINEERING RESEARCH BOARD

### Training and Skill Internship (“VRITIKA”) On

### Identification of Type 2 Diabetes Biomarkers from Single cell sequencing Data with Machine learning/Deep Learning (duration: 2<sup>nd</sup> August– 31<sup>st</sup> August 2024)

#### Target Participants

The proposed Training and Skill Internship is designed and intended for PhD, PG research scholars, and 4<sup>th</sup> year UG students working/studying in the area of CSE/IT/Biotechnology/ Electronics Engineering/other relevant specialization. Maximum number of participants for this program is limited to **5 only**.

#### Selection Process:

The selection of the eligible students/interns for Training and Skill Internship will be done based on the recommendations of the Selection Committee constituted for this purpose by the host institution. The screening will be primarily base on

- ✓ Academic performance in university examinations (CGPA/Percentage of marks).
- ✓ Academic/co-curricular contests participated, and other awards/distinctions obtained.

#### Registration Fee and other Facilities:

- Training registration fee is NIL
- TA/DA will be provided to the participants as per SERB norms.
- Food and accommodation will be provided to all the participants free of costs.
- The registrations are limited to 5 participants.

#### Important Dates:

- Last date of receipt of application: **31<sup>st</sup> July. 2024.**
- Notification about selection: **by email**

#### CHIEF PATRON

Prof. S.K. Patra  
Director, NIT Agartala

#### PATRON

Prof. Mrinal Kanti Debbarma  
HoD, Department of Computer Science & Engg

#### COORDINATOR

Dr. Ranjita Das  
Assistant Professor  
NIT Agartala

#### ADDRESS FOR CORRESPONDENCE

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NIT Agartala, Tripura  
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#### REGISTRATION

#### Application Procedure:

Please fill up the registration form:

<https://forms.gle/wfBTiRA3QQgTMNs67>

Registration Through QR Code



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on

### Identification of Type 2 Diabetes Biomarkers from Single cell sequencing Data with Machine learning/Deep Learning

Sponsored by

Science and Engineering Research Board  
Under Accelerate Vigyan Scheme  
(A Government of India Initiative)



#### ORGANIZED BY

Department of Computer Science  
Engineering National Institute of  
Technology, Agartala,  
Tripura-799046

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

### About the Institution

Established in 1965 as Tripura Engineering College. Later, the Government of India converted the Tripura Engineering College to National Institute of Technology Agartala on 1st April 2006. NIT Agartala is an Institute of National Importance was instituted by Government of India with the mission to herald excellence in technical education and research in the North-East region. NIT Agartala offers undergraduate, postgraduate, and doctoral programs in various fields of engineering, science, humanities, and management. The institute is renowned for its academic excellence, research initiatives, and industry collaborations. NIT Agartala boasts state-of-the-art infrastructure, well-equipped laboratories, and a conducive learning environment.

### Vision

Institute is committed to develop highly competent young Engineers, Scientists, and Management Professionals to cater to the ever-increasing techno-managerial needs of national and international standards fulfilling professional ethics and societal commitment.

### Mision

To produce techno-managerial human resource in line with global need offering state-of-the-art facility, research and training in engineering and allied disciplines.



### About the Department

The Department of Computer Science and Engineering of National Institute of Technology Agartala offers an undergraduate and postgraduate programme in Computer Science and Engineering where students are encouraged to acquire knowledge facilities with an integrated thinking about education research & development, application and training. The students are provided knowledge to understand the fundamental of basic sciences and humanities, inter disciplinary knowledge, innovation, creative problem solving abilities, intellectual honest and professional ethics, capacity for team work in inter disciplinary, national and international environment. The first undergraduate batch rolled out in the year 2003. Since its inception in 1999, the department has always been recognized for excellence.

The department is actively involved in research and also running Ph.D. programs. The research activity of the department includes fundamental research, sponsored and consultancy projects.



### How to Reach NIT Agartala

The Institute is 4 km away from Jirania on Assam-Agartala Highway (NH-44) and about 20 km away from Agartala city. Agartala is well connected by Rail Road and Air. Pre-Paid Taxi and auto services are available from Agartala Airport to the Institute.

### Objectives of the Program

The primary objectives of the internship

- Understand the common workflow of a single cell experiment.
- Build a foundation for exploring the single cell literature.
- Be able to apply Machine learning/Deep learning methods for analysis of single cell data specific to **Diabetes Biomarkers**.
- Grasp the impact of method choice and parameter selection on analysis.

### Nature of Support

- ✓ The interns will be given for meeting daily necessary expenses such as **stationery, consumables, accommodation, food, etc.**, as per the norms of the funding agency.
- ✓ **No STIPEND** will be provided for the internship.
- ✓ The interns will be eligible for **Travelling Allowance (TA)** reimbursement for their journey to the host institute from their hometown/home institute, both ways, as per GOI norms. (Shortest route in Economic Sleeper Train/Bus Fare).
- ✓ **Certificate will be provided** on successful Completion of this training and internship.