



Module PMRF-ISSS037/2025

Numerical computation using Julia – From basics to advanced

Name of the PMRF student

Debojit Chanda

Required background of the students taught

Basic knowledge of computers, enthusiasm for programming.

Course is designed for research scholars, PG and UG students (engineering and basic sciences)

Details of the content of the module

❖ Introduction to Julia

- What is Julia, why use it? Installing Julia, getting started with variables and data types

❖ Basic programming with Julia

- Using conditional statements, loop structure, functions and multiple dispatch

❖ Julia for researchers

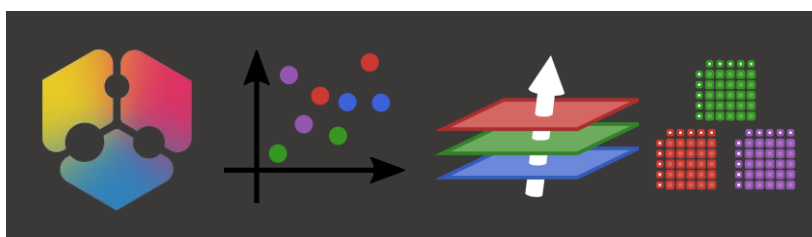
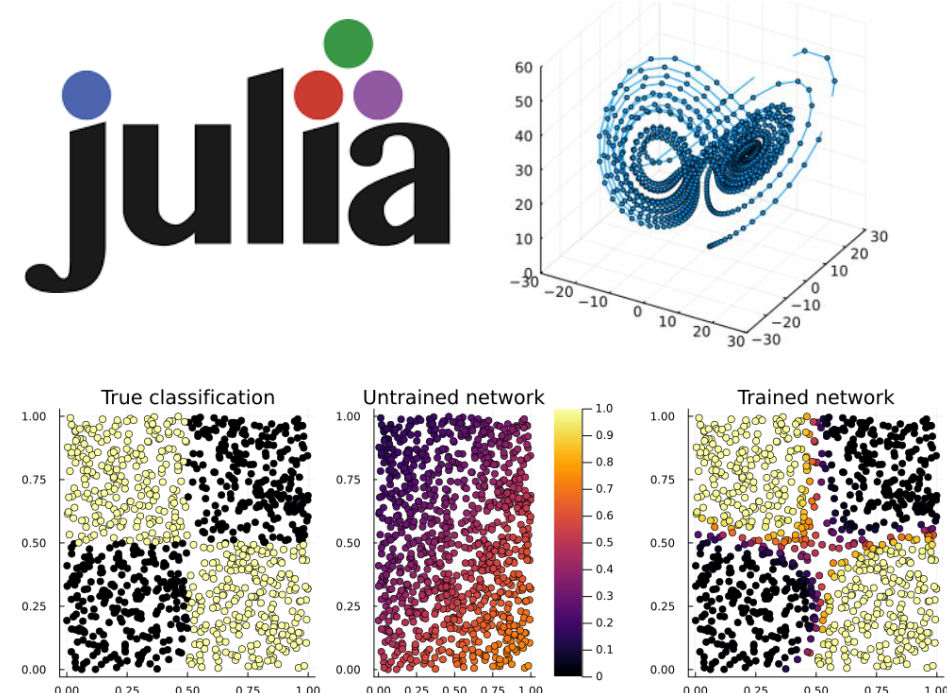
- Data analysis, handling spreadsheets, plotting and curve fitting

❖ Numerical computation

- Interpolation, differentiation, integration

❖ Advance topics

- Image processing, web scrapping, machine learning etc.



Schedule of the module

Date: 14th - 25th April, 2025

Schedule: Recorded video lectures will be uploaded on every *Monday to Friday*

Number of lectures: 10

Duration of lectures: 2 hours each (Total ~ 20 hours)

Meeting link: Recorded lectures will be provided.

Contact email ID: issforum@gmail.com

Registration link: [Link](#)

