MIDAS (Mohan Lab Image and Data Analytics Scholarship)
Code War - Data Analytics

Eligibility: This competition is open to **First-Year Master's students** from any of these disciplines: Statistics, Computer Science, Data Science, Mathematics, Engineering with proficiency in R, Python.
Event Details: September 6, 2025, 2:00 PM – 5:00 PM; **Venue**: CBB 104
Interested candidates should register using this link: Registration Link by 2 SEPT 2025.

Round 1 – Knowledge Assessment Quiz (1 hour)
Format: 30 multiple-choice questions (2 minutes per question)
Focus Areas:

1. **Bioinformatics Basics:** Understanding genes, proteins, cases, controls, samples vs population
2. **Statistics:** Hypothesis testing, p-values, probability distributions, correlation/association, etc.
3. **Machine Learning & AI** - Algorithms, evaluation metrics, and biological applications
4. **Coding in Python & R** - Interpretation of code snippets, prediction of outputs, debugging logic.
5. **Plot Interpretation**
6. **Biological Data Analysis -** Integrating statistical, computational, and biological insights.

Round 2 – Technical Interview: Top 10–20% of participants (based on quiz performance) will advance to **Round 2,** an in-person interview, to assess **problem-solving skills, biological data interpretation, coding logic, etc.**

Rules & Regulations

- **No external assistance** is allowed: no mobiles, books, Google, AI tools, or personal notes.
- We will use a Lockdown Browser to restrict access to any other tabs, software, or websites.
- Participants must carry their **valid student ID** for verification.
- Any form of malpractice will lead to **immediate disqualification**.

Final selected candidates will be awarded the **MIDAS Scholarship** — valued at **$12,000,** disbursed as $1500 monthly stipends over 2 semesters (contingent on satisfactory progress).

Computational Research at Mohan Lab: For more context, please visit our lab website (Mohan Lab) to explore the kind of work and projects we engage in. Specifically, the laboratory handles big data generated from various "OMICs" studies, including bulk proteomics, spatial proteomics and spatial transcriptomics. Hence, we are looking for individuals with expertise in one or more of these core areas: biostatistics, machine learning, image analysis, AI/neural networks, and the ability to configure new algorithms to tackle emerging data analytic bottlenecks in biomedical big data/image analytics.

Be prepared. Be precise. Be analytical!
At Mohan Lab, we believe the data tells a story — your challenge is to read it, reason with it, and reveal its validity under pressure. Most importantly, mining large datasets to identify the underlying disease causing pathways can lead to novel drug targets and save patient lives.