

## International Workshop on Algorithms for Cooperative TU Games using Matrices and Graphs December 20-31, 2021



Hereby, we certify that

Mr. Sahil Karawade

Manipal Academy of Higher Education, Manipal, India

registered for the `International Workshop on Algorithms for Cooperative TU Games using Matrices and Graphs' (ACTGMG 2021) and earned two credits by participating in all the sessions of the course and submitting the tutorial assignments.

Manjunatha Prasad Karantha

Express of allergial of

MAHE, Manipal

Convener, SAC, ICLAA 2021

J. E. S. Raghan

T.E.S. Raghavan

University of Illinois at Chicago, USA

RDD apar

Ravindra B Bapat

Indian Statistical Institute, Delhi

Chair, SAC, ICLAA 2021

Centre for Advanced Research in Applied Mathematics and Statistics

Manipal Academy of Higher Education, Manipal - 576104 Karnataka, India.

Phone: 0820--2922407 E-mail: carams@manipal.edu, carams.mahe@gmail.com Website: www.carams.in, www.manipal.edu