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Department of Robotics and Automation

Report on "Career Guidance Programme" - 2024

NAME OF THE DEPARTMENT: Department of Robotics and Automation

1. Type Event : Career Guidance program on

"Algorithmic Thinking and Problem Solving"

2. Venue : Dr APJ Abdul Kalam Hall

3. Date of the programm: 28th May 2024

4. Time : 1.30 pm to 3.30 pm

4. Chief Guest : Dr. S R Subramanya

President & CEO

Exskillence, SanDicgo, USA

5. Staff Co Coordinator : Dr. Karthikeyan M

Professor & HoD

Department of Robotics and Automation RajaRajeswari College of Engineering

Dr. Vishwanath KC Associate Professor

Department of Robotics and Automation RajaRajeswari College of Engineering

6. Students attended $: 1^s, 2^{nd} \& 3^{rd}$ year students of R&A Department

8. Outcome of the Programme:

Students gained information about the following:

- (a) good analytical, problem-solving, and critical thinking skills;
- (b) understanding of algorithm design techniques;
- (c) ability to apply algorithms for systematic solution development;
- (d) ability to evaluate the solutions for correctness and efficiency;
- (e) experience in working as part of a group;

Campus: #14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bengaluru – 560074





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About the programme

Workshop: Algorithmic Thinking and Problem Solving

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Exskillence

San Diego, USA

Introduction

The essence of all computing is the development of algorithms for the solution numerous problems in various domains such as Engineering, Sciences, Healthcare, Transportation, Urban Planning, Banking and Finance, Retail/Commerce, etc., and their subsequent implementation. Optimal solutions are sought after wherever possible/practical/feasible. In the increasingly technology driven world, it is essential for students in Science, Engineering, and Management to have the capabilities of critical thinking, problem analysis, problem solving, and developing algorithmic solutions to numerous real-world and societal problems. This workshop has been designed to present a systematic way of analyzing the problems and applying appropriate technique chosen among several classic algorithm design techniques for developing solutions to numerous problems that arise in many different domains.

Workshop objectives

The overall objectives of the workshop are to teach methods and techniques of: (a) analyzing the problem; (b) modeling the problem; (c) evaluating and choosing the appropriate algorithm design technique suited to the problem solution; (d) developing and analyzing the solution; (e) presenting the solution.

Workshop activities

This workshop is *hands-on* and the participants will be actively engaged in applying algorithmic techniques to the solutions of several interesting and practical problems. The problems will be drawn from many different domains, such as Engineering, Computing, Transportation, Manufacturing, Management, Social sciences, etc. Each of the problems is analyzed and the most appropriate algorithm design technique is chosen for its solution. The participants will work in groups and compete to develop the most efficient solution.

Workshop outcomes

The workshop outcomes are: (a) good analytical, problem-solving, and critical thinking skills; (b) understanding of algorithm design techniques; (c) ability to apply algorithms for systematic solution development; (d) ability to evaluate the solutions for correctness and efficiency; (e) experience in working as part of a group; (f) fun.

Audience and prerequisites

Students of Engineering, Science, Management, Computer Science, and Information Technology. Also, anyone with some background in science and mathematics, a desire to learn, and an open mind can benefit from this workshop.







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Photos of the programme



Poster of the programme



Dr R Balakrishna Principal addressing during the programme

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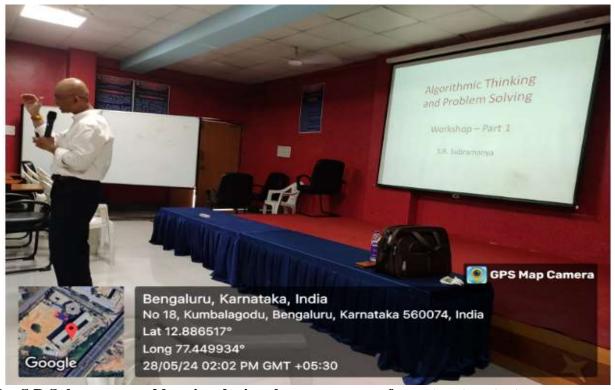




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Dr. S R Subramanya addressing during the programme of Algorithmic Thinking and Problem Solving



Dr. S R Subramanya addressing during the programme

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Dr. S R Subramanya addressing and interacting with the students during the programme



Dr. M.Karthikeyan, HOD RA interacting with the students during the programme

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Group photo with Dr. S R Subramanya, Dr.M.Karthikeyan, HOD RA, Dr.Vishwanath K C and students of the Robotics and Automation

Report prepared by Dr.M.Karthikeyan, HOD-R&A Dr. Vishwanath KC Associate Professor, R&A Mrs. Chetana B R, Instructor of R&A

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