Rashtreeya Sikshana Samithi Trust

R V College of Engineering®

R V Vidyanikethan Post, Mysuru Road, Bengaluru - 560 059

Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi

Approved By AICTE, New Delhi, Accredited By NBA, New Delhi

Five Days Faculty Development Program (FDP) (Offline Mode)

on

Application of Machine Learning Algorithms in Aerospace Engineering

09th to 13th May 2022

Organised by

Department of Aerospace Engineering

RVCE

Image Courtesy: Stock Image

About R V College of Engineering

R.V. College of Engineering (RVCE) established in 1963 is one of the earliest self-financing engineering colleges in the country. Today RVCE offers 12 Under Graduate Engineering programs, 22 Master's Degree programs and Doctoral Studies. Rated one amongst the top ten self-financing Engineering Institutions in the country offering quality technical education.

About the Aerospace Engineering Department

The Department was started in the year 2015 to offer UG program in Aerospace Engineering. Imparting quality education with emphasis on research, sustainable technologies and entrepreneurship for societal symbiosis has been the primary motive of the program. The Department's main objective is to create expertise in specialized areas in aerospace engineering such as aerodynamics, structural design, propulsion systems & control systems with focus on research and innovation.

Department Vision

Emerge as a centre of excellence in Aerospace Engineering, Imparting Quality Technical Education, Interdisciplinary Research & Innovation with a focus on Societal empowerment through Sustainable & Inclusive Technologies.

Department Mission

- Imparting Quality Technical Knowledge in Basic & Applied areas of Aerospace Engineering incorporating the principles of Outcome Based Education.
- Provide state-of-the-art laboratories and infrastructure facilities, conducive to motivate Interdisciplinary Research and Innovation in Aerospace Engineering.
- Develop self-motivated engineers with a blend of Discipline, Integrity, Engineering Ethics and Social Responsibility.
- Strengthening collaboration with industries, research organizations and institutes for Internships, Joint Research and Consultancy.
- Focus towards Integrating Sustainable and Inclusive Technologies for Societal Symbiosis.

Program Educational Objectives (PEOs)

- To provide opportunities for successful professional career with a sound fundamental knowledge in Mathematics, Physical Science & Aerospace Engineering.
- Motivate innovative research in specialized areas of Aerospace Engineering viz Aerospace structural design, Aerodynamics, Aerospace Propulsion and Guidance & Control systems.
- Promoting development of problem solving abilities by adopting analytical, numerical and experimental skills with awareness on societal impact.
- Imbibing sound communication skills, team working ability, professional ethics and zeal for lifelong learning.

Program Specific Objectives (PSOs)

- Utilization of the fundamental knowledge and skills of Aerospace Engineering to develop pragmatic solutions for complex Aerospace Engineering problems.
- Apply Professional Engineering practices and strategies in the development of systems and subsystems for Aerospace Applications.
- Exhibit Effective Communication skills and a Zeal to function with multi-disciplinary teams
- Demonstrate Professional Ethics and Responsibilities in Engineering practices towards the achievement of societal symbiosis.

About the Faculty Development Program (FDP)

Machine learning (ML) is the scientific study of algorithms and statistical models to perform a specific task without using explicit instructions, relying on patterns and inference instead. In simple words, machine learning is nothing but data analysis where large critical data is analyzed and inferred to solve engineering problems.

Presently, ML is the buzz word of today's Artificial Intelligence (AI) industry and is rapidly transforming the technological landscapes with far reaching benefits. Undoubtedly, machine learning is also making huge strides into the Aerospace domain which caters to the military, commercial, and space exploration sectors. The availability of huge technical and passenger data would enable the application of machine learning in streamlining aircraft design, manufacturing, system analysis, maintenance, overhauling, route planning, logistic handling, customer management, and a lot more. In coming years, Machine Learning would be playing a much bigger role in designing efficient workflow processes.

The faculty development program in "Applications of Machine Learning Algorithms in Aerospace Engineering" is designed to provide a platform for understanding the nuances of Machine Learning and its applications specific to Aerospace Engineering. The objectives of the Machine Learning FDP would be as highlighted:

- **Provide with the fundamentals of Machine Learning**
- **Extend the application of Machine Learning to Aerospace Engineering Domain**
- **Exposure to real time case studies involving Machine Learning**
- **Hands-on and practice sessions**

Registration Fee

For Payment: https://rzp.io/l/bIDpXauz0

For Faculty- Rs 590/- plus GST ***(18% GST Rs.90)***

For Registration
https://docs.google.com/forms/d/e/1FAIpQLSf40y-
-4YkYOhGXJOF5YinwSxC07O3HENupSsXXnpMfcEsmOQ/viewform?vc=0&c=0&w=1&flr=0

NOTE

- ***Prior registration is mandatory to attend FDP***
- ***The registration amount includes registration kit, high tea with light refreshments and lunch on all five days***
- ***Hostel accommodation would be provided for outstation participants on chargeable basis***
- ***The Event is planned for accommodating 40-50 participants and the confirmation of participation is based on first-come-first-basis***
- ***Certificate will be issued to the participant on successful completion of FDP. Successful Completion needs 100% attendance and fulfillment of all the assignments, if any.***

Resource Persons

Dr Husain Kanchwala
Assistant Professor,
Centre of Automotive Engineering and Tribology
Indian Institute of Technology-Delhi

Dr Madhukar Rao
Technical Director, ACRi Infotech Pvt. Ltd. (ACRi India)
Professor (adjunct),
CFD Virtual Reality Institute
Bengaluru, Karnataka, India

Dr Sarat Kumar Maharana
Chairman, BoS, VTU (Aero)
Prof, Dean and Head,
Department of Aeronautical Engineering
Acharya Institute of Technology, Bengaluru

Mr Alok Tiwari
Analytics Director
OLA Electric
Bengaluru, Karnataka

Mr Apurv Anand
Senior Director
Engineering (AI) and Digital Operations
Baker Hughes, A GE Company

Dr Pramod Naik
Tech Director,
AIEdge Technologies Private Limited

Ms Anusha Rammohan
Senior Tech Lead,
Myelin Foundry

Mr Karunesh Parakh
MD & CEO,
Tantaliser AlterSpace

Chief Patrons
Dr. M K Panduranga Setty, President, RSST
Sri. A V S Murthy, Hon. Secretary, RSST
Sri. D P Nagraj, Joint Secretary, RSST
Dr. M P Shyam, Trustee, RSST

Co-Patrons
Dr. K N Subramanya, Principal, RVCE
Dr. K S Geetha, Vice-Principal, RVCE

Convenor
Dr. Ravindra S Kulkarni, Prof & Head, Dept of Aerospace Engg, RVCE

Co-ordinators

R Supreeth
Asst Professor
Dept of Aerospace Engineering,RVCE
+91-9980844119
supreethr@rvce.edu.in

Dr Promio Charles F
Associate Professor
Dept of Aerospace Engineering,RVCE
+91-9036546003
promiocharlesf@rvce.edu.in