



Workshop

## “Hands-On Workshop on Machine Learning with python”

24<sup>th</sup> April 2021-26<sup>th</sup> April 2021



Organizedby

**Department Of Computer Science and Engineering & Information Science and Engineering**

**Sharnbasva University,**

**Kalaburagi-585102,Karnataka,**

**India**



**Phone/FaxNo.:08472-277852,277853,277854**

**Website:www.Sharnbasvauniversity.edu.in**



**ಶರಣಬಸವ**  
**Sharnbasva**



**ವಿಶ್ವವಿದ್ಯಾಲಯ**  
**University**



Kalaburagi - 585103, Karnataka - India  
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Phone / Fax No. 08472-277852, 277853, 277854, 277855 www.sharnbasvauniversity.edu.in - email : Sharnbasvauniversity@gmail.com

#### ABOUT THE UNIVERSITY:

Sharnbasva University is the first private multi-disciplinary university in the entire North Karnataka providing avenues for the students to pursue higher education in almost all the fields of education. Providing quality education at affordable cost has been the hallmark of the University. The University has set itself on the path of emerging as one of the Centre of excellence and a World Class University, which is the dream of Pooja Dr. Sharnbasva Appa, the visionary Chancellor of the youngest private university in the entire state.

The Sharnbasva University is backed by the rich legacy of more than 100 years of providing the quality education to the deprived sections of the people in the educationally backward Kalaburagi and neighboring districts. The Sharnbasveshwara Vidyā Vardhaka Sangha, under whose aegis the Sharnbasva University is functioning has the honor of starting the first school exclusively for girls way back in 1934 opening doors of learning to the girls. The legacy of providing optimum importance to the girl education has continued to this day and the Sangha was the first to start an exclusive Engineering College for Women in the entire North Karnataka and the second in the entire Karnataka. This College is now part of the Sharnbasva University.

#### VISION:

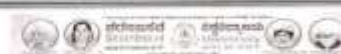
- Enhancing the horizon of world knowledge by promoting international understanding through imparting quality education and creating value added skill based human resource.
- We aspire to become top ranking National and International Centre of Excellence producing high caliber leaders and captains of industry.
- Inculcating the spirit of "Vasudhaiva Kutumbakam" (The world is one family).
- "Sakala Jeevanacharya Leena Dayasau" (Wishing the worldly good and betterment of all the living beings) is our motto.

#### MISSION:

- Achieving academic excellence through innovatively designed, research intensive, industry oriented education.
- Instilling the culture of independent thinking, independent writing, independent speaking and independent living among the students in all the activities.
- Foster the spirit of national development and develop global competencies, nurture creativity and encourage entrepreneurship provide an education with rigor and relevance.
- Provide academically excellent, time efficient, and cost effective higher education.
- Provide an education which enhances the ability of students to learn throughout the life.
- Ensure freedom of thought and expression and a campus without discrimination.
- Encourage the spirit of specialization and ensure close inter-relationship between Teaching, Scholarship and Research.
- Develop and deliver distinctive and value driven academic programmes that are flexible and responsive to Local, National and International needs.
- Cultivate academic, business and community driven partnership that positions the University as a leading choice for adult learners.
- To work effectively with other institutions and organizations, whose such partnerships can lead to understanding research and teaching.

#### ABOUT THE DEPARTMENT:

The Department of Computer Science & Engineering and Information Science & Engineering established in the year 2017, in Faculty of Engineering and Technology (Exclusively for Women), Computer Science & Engineering Department is having a post graduate course in Computer Science and Engineering and also a research program. Department has having well equipped laboratories and well experienced faculty members. Department conduct periodic Faculty Development Programs, workshops, seminars, symposiums, conferences and Tech Fests to help the faculty, students and research scholars. The department has very good placement record.



#### "Hands-on Workshop on Machine Learning with Python"

34<sup>th</sup> April 2021-26<sup>th</sup> April 2021

Machine Learning Using Python



#### ORGANISED BY

DEPARTMENT OF COMPUTER SCIENCE,  
INFORMATION SCIENCE AND ENGINEERING  
FACULTY OF ENGINEERING AND TECHNOLOGY  
(EXCLUSIVELY FOR WOMEN)

SHARNBASVA UNIVERSITY, KALABURGI

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#### DUB SPIRITUAL GRACE & INSPIRATION

Lingakya Pooja Reddappa Appa  
2<sup>nd</sup> Mahadasha Peethacharya, Sharnbasveshwara Vidyā Vardhaka Sangha Kalaburagi

Hatashree Godutal Doddappa Appa  
Sharnbasveshwara Samithana, Kalaburagi

#### CHIEF PATRON

Pooja Dr. Sharnbasappa Appa  
1<sup>st</sup> Mahadasha Peethacharya, Sharnbasveshwara Samithana, President, Sharnbasveshwara Vidyā Vardhaka Sangha & Chancellor, Sharnbasva University, Kalaburagi

#### PATRONS

Hatashree Dr. Dakshayani S. Appa  
Member, BOD, Sharnbasva University, Kalaburagi,  
Chaperson, Sharnbasveshwara Vidyā Vardhaka Sangha, Kalaburagi

Shri. Basavaraj Deshmukh  
Secretary, Sharnbasveshwara Vidyā Vardhaka Sangha, Kalaburagi, Member, BOD, Sharnbasva University, Kalaburagi

#### ADVISORY COMMITTEE

Dr. Anjanan V. Nisety  
Vice-Chancellor, Sharnbasva University, Kalaburagi  
Shri R. S. Deshmukh  
Vice-Chancellor, Sharnbasva University, Kalaburagi  
Dr. V. D. Hyim  
Vice-Chancellor, Sharnbasva University, Kalaburagi  
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Registrar (Evaluation), Sharnbasva University, Kalaburagi  
Dr. Shivalingappa Hegadi  
Finance Officer, Sharnbasva University, Kalaburagi  
Dr. Basavaraj S. Hachigudi  
Dean, Sharnbasva University, Kalaburagi

#### CONVENER:

Dr. Lakshmi Palli  
Dean, Sharnbasva University, Kalaburagi

#### RESOURCE PERSON :

Dr. Arunji Chowdhury, CEO, ESTS, Thane, Mumbai

#### ORGANIZING COMMITTEE

CO-CONVENERS:  
Dr. Shivashree Palli, Professor, Department of CSE, PETW, Sharnbasva University, Kalaburagi.

Dr. Sugata Halder, Professor, Department of CSE, PETW, Sharnbasva University, Kalaburagi.

#### COORDINATORS:

Prof. Basavaraj Palli, Asst. Prof. Department of ISE, PETW, Sharnbasva University, Kalaburagi  
Prof. Basava B. , Asst. Prof. Department of ISE, PETW, Sharnbasva University, Kalaburagi  
Prof. Sachin Bangar, Asst. Prof. Department of ISE, PETW, Sharnbasva University, Kalaburagi

#### CONTACT DETAILS:

Prof. Basava Palli : 9310913335  
Prof. Sachin B : 9888885879  
Prof. Sachin Bangar: 9892070467

WHO CAN PARTICIPATE: The faculty members of the AICTE approved institutions, Research scholars, PG scholars, participants from Government, Industry and staff of host institutions.

REGISTRATION: Maximum 300 participants will be allowed to register for the RW. Registration will be on first come first serve basis.

TEST AND PARTICIPATION CERTIFICATE: Certificates will be given to registered participants and subsequently approved by the coordinator, provided participants obtain 80% attendance, 50% marks in assessment and feedback given by participants on portal only.

#### VENUE:

No physical presence is needed; the programme will be conducted by Faculty of Engineering and Technology (Exclusively for Women), Sharnbasva University, Kalaburagi. All the sessions will be conducted using online mode.

ABOUT WORKSHOP: Machine Learning is one of the essential fundamentals required to step into the rapidly emerging and upcoming era of Artificial Intelligence (AI). It is a scientific discipline that explores the construction and study of algorithms that can learn from data. Such algorithms operate by building a model from example inputs and using that to make predictions or decisions, rather than following strictly static program instructions. Machine learning is closely related to and often overlaps with computational statistics; a discipline that also specializes in prediction-making. Data processing requires "computational thinking" and is essential to have hands-on experience in using computational tools for problem-solving. This workshop aims to explore the recent development and various machine learning aspects. This training is an introduction to the concept of machine learning, its algorithms and application using Python. The workshop will be an "open-door" to build the computational skills required for machine learning. The topics to be covered in this workshop are Introduction to Statistics, Introduction to AI and Machine Learning, Examples of ML real-time application, Machine Learning Types, Features Engineering, Regression, Classification, Unsupervised Model and Artificial Neural Networks.

OBJECTIVES: This program aims to provide hands-on experience to the faculty, research scholars and students in the field of Machine Learning using Python. The program will help the participants to learn the principles of Machine Learning and understand how to apply Machine Learning for solving problems.

OUTCOMES: This workshop will cover the basic algorithm that helps students, researchers, and faculty members to build and apply prediction functions with an emphasis on practical applications. attendees, at the end of the workshop, will be technically competent in the basic and the fundamental concepts of Machine Learning.

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**"HANDS-ON WORKSHOP ON MACHINE LEARNING WITH PYTHON"**  
**DEPARTMENT OF COMPUTER SCIENCE/INFORMATION SCIENCE ENGINEERING**  
**FACULTY OF ENGINEERING AND TECHNOLOGY (EX-FOR WOMEN)**  
**SHARNBASVA UNIVERSITY, KALABURAGI**  
**APRIL 24<sup>th</sup> to 26<sup>th</sup> -2021**  
**Program Schedule**

DAY	SESSIONS	EVENT DESCRIPTION	DURATION
Day 1 Saturday 24-04-2021		INAUGURATION	10:00am to 10:30
	Session 1	Introduction to Statistics	10:30 am to 12:00pm
		Short Break	12:00pm -12:15pm
	Session 2	Introduction to AI and Machine Learning	12:15pm to 01:30pm
		Lunch Break	01:30pm to 02:00pm
	Session 3	Examples of ML real-time applications	02:00pm to 03:30pm
		Short Break	3:30pm to 3:45pm
Day 2 Sunday 25-04-2021	Session 4	Machine Learning Types	3:45pm to 5:30pm
	Session 1	Feature Engineering ( Missing Data, Data categorization, Feature Scaling)	10:00am to 11:30am
		Short Break	11:30am- 11:45am
	Session 2	Regression ( Univariate , Multivariate , Polynomial, Model efficiency)	11:45am to 01:30pm
		Lunch Break	01:30pm to 02:00pm
	Session 3	Regression	02:00pm to 03:30pm
		Short Break	3:30pm to 3:45pm
Day 3 Monday 26-04-2021	Session 4	Examples on regression	3:45pm to 5:30pm
	Session 1	Introduction to classification,	10:00am to 12:00am



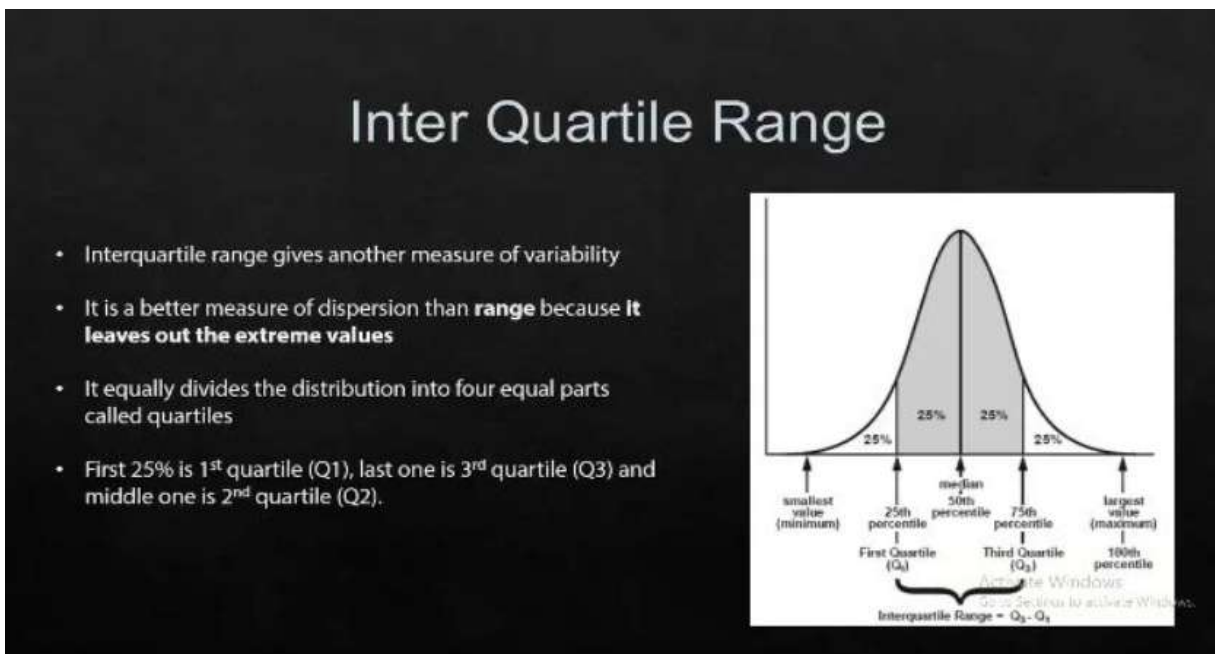
## Activity Report

<b>Title of the Event</b>	<b>Hands-On Workshop on Machine Learning with Python</b>
<b>Date of Activity</b>	24 <sup>th</sup> April2021-26 <sup>th</sup> April2021
<b>Time of Activity</b>	10:00AMto05:30PM
<b>Type of Activity (Cultural/ Cocurricular/Curricular)</b>	Cocurricular Activity
<b>Resource Person</b>	<b>Mr.Arunjit Chowdhaury</b>
<b>Professional details of Resource Person</b>	<b>CEO,EBTS,THANE,MUMBAI</b>
<b>Program/Course/Class</b>	B.Tech./CSE/ISE/6 <sup>th</sup> Semester and Staff members
<b>Number of Students attended</b>	605
<b>Number of Staff attended</b>	56
<b>Activity Incharge</b>	Prof. Chetan and Sweta M
<b>Description of Activity</b>	To furnish information about Machine Learning with python concepts and ideas that makes easier for final yearcomputer science and information science andengineering students to get opportunities in Machine Learning domain. <b>Mr. Arunjit Chowdhaury</b> conveyed the Machine Learning with Python Hands-On sessions. Final year students and staff members are benefited from this technical talk.

## Activity Screenshots



Models in AI to generate the best output you need to develop the model



Quartile Distribution

## Quiz

### Calculate Interquartile Range

Here are 19 scores listed below:

5, 7, 10, 15, 19, 21, 21, 25, 22, 23, 23, 23, 23, 23, 24, 24, 24, 24, 22

Quiz conducted during workshop

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