

Learning with Vodafone Programme

Activity	Online Student Workshop on Linux and Data Analytics
Dates	26 th November to 04 th December, 2020
Venue	Online Channels – MS Teams

Program Overview

The 'Learning with Vodafone University Engagement Program' (which a **CSR initiative of Vodafone Intelligent Solutions (_VOIS)**, designed and executed by **Vodafone India Foundation** and implemented by **Connecting Dreams Foundation**) was conceived given the changing world order in the area of technology. This program will enable the students to bolster themselves by acquiring skills which will enable in design of meaningful solutions to real world technological problems

The program content will include the following areas for a college/university to choose from: Data Analytics, Machine Learning, Artificial Intelligence, Cloud Computing etc. As a part of the long term roadmap that we have envisioned as a part of this program, we would be offering the students and the faculty an opportunity to participate **in finding solutions to the existing real world problems with the help of bootcamps, hackathons, and conversations with experts from the industry**. This will ensure that many students go through the program content and acquire market-linked skills, thereby, enhancing their employability in the ITSS sector.

About the Workshop

Connecting Dreams Foundation in collaboration with Vodafone India Foundation is proposing to organize student workshops on fundamentals of Linux and Data Analytics. This workshop will provide an opportunity to learn and build foundational skills in some of the widely used industry application areas. To ensure a comprehensive learning experience for students the workshops are focused on providing a hands-on learning experience for designing applications for several real-world use-cases.

Certification

Certificates will be awarded to students upon successful completion of the workshop all workshop activities as follows:

1. Active participation in all the sessions
2. Timely submission of all the assignments and other activities
3. Scoring 50% or more in the final assessment

Target Audience

This program is suitable for all engineering students, The only requirement is an interest in the field of data and its paraphernalia. Students interested in pursuing a career in Data Science are encouraged to participate.

Workshop Pre-requisites

Participants attending the workshop should have

- Familiarity with Linux Fundamentals and commands



- Basic understanding of Python
- Participants should have the following installed on their machines
 - Computer Machine with at least Core i3 and 4 GB RAM running with Ubuntu 18.04 LTS
 - Anaconda for Linux - Python 3.7 version

https://repo.anaconda.com/archive/Anaconda3-2020.02-Linux-x86_64.sh

Workshop Outcomes

At the end of the program, participants will be able to

- Open source OS concepts
- Execute various useful Linux shell commands
- Utilize different Linux text editors for shell scripting
- Develop and execute applications in the Linux environment
- Learn how to use Python to develop applications
- Use data analytics tools and technologies with ease
- Understand and experience in building real-world solutions for Data Analytics
- Translate data-driven insights into decisions and actions
- Equip themselves with knowledge in areas of Data Analytics

Workshop Session Agenda

The workshops will be conducted in daily online sessions at 9:30 am until 04th December, 2020. Each session will be for 90 minutes each and will include hands-on exercises for students to practice along with the workshop speakers.

The workshop resources like learning materials, source code, and other guides will be available to students during the workshop through an online repository.

Day	Date	Timeline	Section	Description
Day 1	26 th Nov.	9:30 – 11:00 am	Introduction	Open Source Operating system concepts and Linux shell commands
Day 2	27 th Nov.	9:30 – 11:00 am	Linux	Linux Shell scripting Application Development
Day 3	30 th Nov.	9:30 – 11:00 am	Linux	Data Analytics with Python and Numpy
Day 4	01 st Dec.	9:30 – 11:00 am	Data Analytics	Data ingestion with Pandas
Day 5	02 nd Dec.	9:30 – 11:00 am	Data Analytics	Data visualization: Matplotlib
Day 6	03 rd Dec.	9:30 – 11:00 am	Data Analytics	Data Analytics Case Studies



Day	Date	Timeline	Section	Description
Day 7	04 th Dec.	9:30 – 11:00 am	Data Analytics	Assessment and Reflections

About Vodafone Intelligent Solutions

Vodafone Intelligent Solutions (_VOIS) formerly known as Vodafone Shared Services (is a strategic arm of Vodafone Group Plc, for which it creates value by enhancing quality and efficiency of a number of processes in the IT/ ITeS domain. Established in 2006, _VOIS has evolved into a global, multi- functional organization that currently has centres across India, Egypt, Romania and Hungary.

In 2009, _VOIS started operating in India and now has established global delivery centres in Pune, Bangalore and Ahmedabad. _VOIS India supports global markets and group functions of Vodafone, and delivers best in class customer experience through multi-functional services in the areas of Information Technology, Networks, Business Intelligence and Analytics, Digital Business Solutions (Robotics AI), Commercial Operations (Consumer Enterprise), Finance Operations, Supply Chain Operations and HR Shared Services

About Vodafone India Foundation

Over the last 25 years, Vodafone India Foundation network has focused on combining Vodafone's expertise with the company's charitable giving to do social good in the world. As Vodafone's reach continues to expand - moving from mobile to connectivity - there are greater opportunities for Vodafone India Foundation to harness these advancements for the benefit of society.

In India, Vodafone India Foundation focusses on addressing challenges relating to education, equality and access. We are committed to enabling people and technology to drive innovation, disseminate knowledge, and create shared value to improve lives. We work in partnership with key charities, development agencies, and the community to drive social change on a large scale in India.

About Connecting Dreams Foundation (CDF)

CDF is focused on bridging the academia industry divide, enhancing student employability, promoting innovation and creating an entrepreneurial ecosystem for youth CDF is a social enterprise that believes that lasting changes to society can only come from ubiquitous, high quality, market relevant educational interventions to youth
