

ACM Student Chapter @ IGDTUW
Official Technical Society at Department of Information Technology

Date: 6th May, 2020

Subject: Summer Workshop-cum-Internship 2020

Dear students,

In order to facilitate students in upskilling and help them in project development, ACM Student Chapter plans to conduct summer workshop-cum-internship 2020 as per modalities below.

1. Topics & Resource Persons: Broad theme shall be 'Data Science & Machine Learning', topics would include (but not limited to) python programming basics, regression and classification, deep learning. The format shall be classes for initial 4 weeks followed by project work for 2-4 weeks. Details in Annexure-1.

2. Mode, Dates and Duration: It shall be held in online mode. It shall start from 15th June onwards. Duration shall be 6 - 8 weeks.

3. Finances: Nominal fee shall be collected from participants and deposited in ACM Student Chapter account, as per past practice. Chapter has been working in self-financial mode since its inception. Details in Annexure-2.

4. Participant: Anyone (student / faculty) can participate on a voluntary basis. It is open to all in IGDTUW and outside as well across all genders. Students can be from BTech / BSc / MCA / MTech / PhD. There is no upper limit on the number of seats, since it will be done in completely online mode.

5. Internship: Given that the event involves project work, successful completion of the same, can be considered equivalent to the summer/industry internship as per the University rules.

6. Speakers: Faculty from IGDTUW, IIIT, DTU, NSUT and senior researchers from industry and research labs.

7. Expectation from Participants: No prior knowledge of any programming is required. Lectures shall be tutorial style with emphasis of hands-on, therefore, participants must have access to dedicated computer/laptop and Internet connection.

Best Wishes

Rishabh Kaushal
Assistant Professor &
Faculty Advisor (ACM Student Chapter @ IGDTUW)

Annexure-1: Tentative Outline of Topics and Resource Persons

No prior knowledge of programming is expected. Python shall be taught from ground-up with data science and machine learning orientation. Topics are indicative, we shall add more fine details and share with registered participants.

Format: Topics shall be taught in the first 4 weeks, five days per week, followed by project guidance in the next 2-4 weeks. Each day shall be divided either into 4 time slots of 1.5 hrs each or 6 time slots of 1 hr each.

Topic	Day
Preparation of Computing Environment & Software Installation	1
Python - Introduction, Data Structures.	2
Python - Libraries for Data Processing	3
SQL Basics and Python Integration	4
MongoDB and Python	5
Data Collection - APIs	6
Data Collection - Web Scraping	7
Automating Actions - Selenium	8
Data Preprocessing	9
Data Visualizations	10
Introduction to Machine Learning	11
Linear Regression	12
Linear Regression	13
Logistic Regression	14
Building ML Systems	15
Neural Networks	16
Neural Networks	17
CNN	18
RNN	19
Project Orientation	20

Annexure-2: Registration Fee from Participants

Why are we being charged a fee ?

- As a token of thanks to the time and effort put up by speakers by an honorarium as per University norms.
- It instills a degree of seriousness among students as per past experience.
- ACM Student Chapter @IGDTUW runs on self-financial basis, and sustains its activities through the fee collected.

How much is the fee ?

Rs 3500/- plus taxes from each participant which includes

- 100+ hrs of lectures, study material, etc.
- project guidance for 2 - 4 weeks.
- paid services for cloud based API access and hardware requirement (GPU/Memory) on need basis for a project.

Discount of upto Rs 1500/- for active student ACM members.

How to register and pay the fee ?

Step 1: Online Registration (No Payment required at this stage)

<https://forms.gle/GkWb2qTii1FyXxWK8>

Step 2: Payment

Details shall be shared soon through **email** to the online-registered participants. So, fill your email carefully.