



Six Week Summer Internship

on

Machine Learning and its application in Cyber Security

(Blended Mode)

6th June –18th July, 2022 (including Project Work)

Organized by

Department of IT Indira Gandhi Delhi Technical University for Women

Patron

Dr (Mrs.) Amita Dev, Hon'ble Vice Chancellor, IGDTUW

Organizing Committee

Prof. A K Mohapatra, HoD (IT), IGDTUW Dr. Nonita Sharma, Associate Professor, Co-ordinator Dr. Deepak Sharma, Associate Professor Ms. Charu Gupta, Assistant Professor Dr. Bhawna Narwal, Assistant Professor

About the Summer Internship Program

The technical sessions for Summer Internship program will be conducted from 6^{th} June – 18^{th} July 2022. The students will be learning the Concepts of Cryptography and Information Security Web Security & OWASP-10, Application of Machine Learning in Cyber Security, Concepts of machine learning like Regression, Classification, Clustering etc. At the end of the technical sessions, the students will carry out the project work from 3^{rd} July – 18^{th} July 2022.

Course Contents

Technical Sessions (6th June – 3rd July 2022)

- Information Security Basics
- Cryptography and its application
- OWASP Top 10
- Firewall, IPS/IDS, SIEM, Server Logs
- Fundamentals and Applications of Machine Learning and AI
- Basic Machine Learning for Cyber security
- Fundamentals and Applications of Machine Learning and AI
- ML Development Life Cycle
- Supervised Learning Techniques
- Unsupervised Learning Techniques
- Dimensionality Reduction
- Collaborative Filtering
- Case Studies with Hands-on in Python

Project Work (3rd July -18th July 2022)

- Project Work (Participants have to develop a project)
- The Project work will be evaluated for successful completion of the internship

Resource Persons

Experts from premier National and International academic Institutions and Industry with vast experience in the area of Information Security, AI and Machine Learning. Hands-on practical training will be conducted by experts.

Who can Apply

Internship is open to MTech., B.Tech., MCA. students having knowledge of Python Programming.

Batch Size

The maximum number of students in the batch is 100.

How to Apply

Interested candidates should fill the online registration form latest by <u>26.05.2022 by 05:00 pm</u> at the following link:

https://forms.gle/7MuQpuir36EmAjHu6

Registration Fee:

Rs 1000/- (for IGDTUW students) Rs 2,000/- (for outside IGDTUW students)

Bank Details for Registration Fee Payment

Name and Address of Beneficiary	: IGDTUW, Anveshan Foundation
Bank Account Number	: 0900100 0021199
IFS Code	: PSIB 000 1098
Name and Address of Bank	: Punjab and Sind Bank, Kashmere Gate, Delhi 110006

Certificate

On successful completion of the Internship certificate shall be awarded.

Contact Us

For any Query, please write to hodit@igdtuw.ac.in

<u>About the University</u>

Indira Gandhi Delhi Technical University for Women (IGDTUW) is a State University of Government of Delhi. The University facilitates and promotes studies, research, technology, innovation, incubation, and extension work in emerging areas of professional education among women. The objective of the University is to foster industry relevant research and innovations and empower the women of our country through value based higher education making them employable, self-reliant, responsible citizen of the country.

About the Department

Department of IT aims to prepare students to undertake careers involving innovation and problem-solving using IT, or to undertake advanced studies for research careers in IT. The department has established its expertise in the emerging areas like Information Security, Machine Learning, Big Data Analytics, Software Development and Cryptography to name a few.