AICTE Training and Learning (ATAL) Academy Faculty Development Programme (FDP)

On

Recent Trends and Challenges in Image Processing and Computer Vision







29th Nov, 2021-3rd Dec, 2021



Patron

Padma Shri Prof. (Dr.) Mahesh Verma

Hon'ble Vice Chancellor, GGSIP University

Dean, USIC&T

Prof. Pravin Chandra

Dean, USIC&T, GGSIP University

Course Coordinator

Dr. Jyotsna YadavUSIC&T, GGSIP University

OBJECTIVE OF THE COURSE

The proposed FDP is designed to offer a unique opportunity to the participants to interact with the prominent experts from industry, faculty from premier academic institutions, and distinguished practitioners working in the area of Image processing & Computer vision. Lectures will be delivered by eminent experts, having rich teaching and practical experience in their respective field of application and hence will provide deeper insight and knowledge to the participants about the advances in the above mentioned field. The primary target group for the FDP are teachers of Colleges, University Department, Academic Institutions, Research Scholars, UG and PG students who are engaged in research (or) planning to undertake research and industry personnel.

COURSE CONTENTS

- > Fundamentals, applications, recent trends & challenges in Image Processing & Computer Vision.
- ➤ Artificial Neural Networks and Fuzzy Logic for Pattern Recognition in Computer Vision (Implementation using MATLAB)
- > Deep learning for computer vision: Basic concepts & recent advancements
- > Support Vector Machines in Image Processing
- **➤** Object Recognition
- > Image Watermarking in Computer Vision (Implementation using MATLAB)
- > Encrypted Multimedia Processing
- **➢** Biometrics in Computer Vision (Implementation using MATLAB)
- ➤ Single and Multimodal Biometric Recognition: (Speech, GAIT, Palmprint etc.)
- ➤ Role of Medical Imaging in Computer Vision (Hands On)
- > Application of computer vision in plant disease image classification (Hands On)

ABOUT ATAL ACADEMY

Online ATAL academy is established with a vision to empower faculty to achieve goals of Higher Education such as access, equity and quality. The academy also help in imparting quality technical education in the country and support technical institutions in fostering research, innovation and entrepreneurship through training.

ELIGIBILITY OF PARTICIPANTS

Online ATAL FDP is open to regular faculty members of AICTE or UGC recognized educational institutions, technical universities/deemed universities and other research/ training institutions, Research Scholars, PG students and participants from Government, Industry (Bureaucrats/Technicians etc.).

REGISTRATION DETAILS

- ☐ There is **no registration fee** as the said programme is sponsored by AICTE Training and Learning (ATAL) Academy.
- ☐ Interested participants can register using the following link:

https://atalacademy.aicte-india.org/login

Step 1: Sign-Up

Step 2: Select the Role 'Participant'

Step 3: Click on Workshops

Step 4: Select 'Faculty Development Programme on

Recent Trends and Challenges in Image processing and Computer Vision'.

Step 5: Click the plus sign button to register.

Participants will be selected on first come first serve basis.

RESOURCE PERSONS

Faculty and Experts from IIT Delhi, JNU, DTU, NSUT, University of Albany, GGSIPU, Thapar Institute of Engg, & Technology etc.

UNIVERSITY VISION

The University will stimulate both the hearts and minds of scholars, empower them to contribute to the welfare of society at large; train them to adopt themselves to the changing needs of the economy; advocate them for cultural leadership to ensure peace, harmony and prosperity for all.

ABOUT GGSIP UNIVERSITY

Gobind Singh Indraprastha University Guru (GGSIPU) is the first University established in 1998 by the Govt. of NCT of Delhi under the provisions of Guru Gobind Singh Indraprastha University Act, 1998 read with its Amendment in 1999. The University is recognized by University Grants Commission (UGC), India under section 12B of UGC Act. It is a teaching and affiliating University with the explicit objective of facilitating and promoting "studies, research and extension work in emerging areas of higher education with focus on professional education. The University promotes establishment of colleges and Schools of Studies as Centre's of Excellence in emerging areas of education with focus on professional education in disciplines of engineering, technology, medicine, education, pharmacy, law, etc.

KEYPOINTS

- ☐ There is no Registration fee for any participant.
- ☐ The FDP will be conducted in online mode.
- ☐ Test will be conducted at the end of the programme.
- ☐ Participants will be selected on first come first serve basis. Selected candidates will be intimated by email only.
- ☐ The certificates will be issued to those participants who have attended the programme with minimum 80% attendance and scored minimum 60% marks in the test.
- ☐ Certificate will be issued by AICTE Training and Learning (ATAL) Academy.

ABOUT USIC&T DEPARTMENT

The University School of Information, Communication & Technology (USIC&T) has been established to design and implement courses with a twin objective of generating effective professionals and to keep pace with the R & D activities of this fast emerging and changing field of Information & Communication Technology. The school aims at inculcating essential skills as demanded by the global software industry, through the interactive learning process.

The School was set up with an aspiration to generate manpower, with the ability to take on challenges and fare forward in the realm of Information & Communication Technology. The Curriculum has been designed to cater to the ever-changing demands of information, communication technology, with the necessary inputs from the Industry. The School has highly qualified & experienced faculty who excel in their respective areas. The School also encourages research work in various areas of information & communication technology. The school aspires to produce individuals equipped to contribute for progress at all levels: individual, national and global.

ORGANIZING COMMITTEE

Dr. Jyotsna Yadav

Dr. Anuradha Chug

Dr. Rahul Johari

STUDENT ORGANIZING COMMITTEE

Ms. Shradha Verma	Ms. Sandhya Tarwani
Ms. Tanvi Dalal	Ms. Kriti Lakra
Ms. Juhi Chaudhary	Mr. Amit Sengar
Ms. Nikhat Ali	Ms. Shikha Gupta
Mr. Anshul Bhatia	Mr. Aditya Revoo
Ms. Mansi Agnihotri	Mr. Tirthankar Rao
Ms. Sonam	Mr. Karan Raj Pant
Ms. Shubhika Giri	Mr. Tushar Khanduri

SUPERVISORY COMMITTEE

Prof. B. V. Ramana Reddy

Prof. Navin Rajpal

Prof. C. S. Rai

Prof. Arvinder Kaur

Prof. Anjana Gosain

Prof. Udayan Ghose

Prof. Bharti Suri

Prof. Amit Prakash Singh

Prof. P. S. Bharti

Prof. R. K. Purwar

Prof. Anju Saha

Prof. R. Rama Kishore

Prof. V. P. Vishwakarma

Prof. Manoj Taleja

Prof. Anurag Jain

Prof. Sanjay Malik

ADDRESS OF CORRESPONDENCE

Dr. Jyotsna Yadav

(Course Coordinator)

Assistant Professor, University School of

Information, Communication & Technology

(USIC&T), GGSIP University, Dwarka, New Delhi.

Phone No.: 9873414557, 8826705553

E-mail: fdp.usict@ipu.ac.in, jyotsnayadav@ipu.ac.in

Website: www.ipu.ac.in