

IGNITE 2023



A DAILY NEWSLETTER

Editor in Chief

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IQAC SEMINAR SERIES





A seminar on "CO, PO, PSO, and PEO for OBE" was organised by the Internal Quality Assurance Cell (IQAC) in association with the Department of Electrical and Electronics Engineering and took place at the seminar hall of ACT. The resource person for the seminar was Dr.Srinivasan Alavandar, Principal of Agni College of Technology. The faculty members from all the departments participated in the seminar.

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TRAINING AND SKILL DEVELOPMENT









As part of NSDC training, **Drone Assembly** training is conducted in the Texas lab for the enrolled II-year students on December 15, 2023. The training is scheduled in different timing slots from 8:30 a.m. to 3:30 p.m. About 130 students attended this training conducted by the trainers, namely, **Ms. Mathiyarasi**, **AERO**, **Dr. Ratheesh**, **ECE**, **Mr. Vishnuvaradhan**, **CIVIL**, **Mr. Arularasan**, and **MHT**.

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TRAINING AND SKILL DEVELOPMENT







As part of NSDC training, **Drone Flying** training is conducted at the football field for the enrolled II-year students on December 15, 2023. The training is scheduled in different timing slots from 8:30 a.m. to 3:30 p.m. About 130 students attended this training conducted by the trainers, namely, **Mr. Thandial Selvam (AERO) and Dr. Balaji Madhavan (CSE)**.

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Optical and Quantum Electronics (2024) 56:210 https://doi.org/10.1007/s11082-023-05932-0

Deep learning-guided femtosecond laser processing in optical materials and devices for nano fabrication advancements

V. Mohanavel¹ · G. Gandhimathi² · Diwakar Bhardwaj³ · M. Kavitha⁴ · Govindaraj Ramkumar⁵ · M. V. Ishwarya⁶ · Mohammed Ali⁷

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Abstract

This research paper explores the integration of AlexNet-guided femtosecond laser processing (GFLP) techniques in optical materials and devices to achieve significant advancements in nanofabrication. The combination of deep learning, specifically utilizing the AlexNet architecture, and ultrafast laser processing offers a novel approach for precise and efficient manipulation of materials at the nanoscale. The paper presents a comprehensive investigation of the synergistic effects of deep learning and femtosecond laser processing on various optical materials, highlighting their potential for creating intricate nanostructures and improving device performance. Experimental results demonstrate the enhanced precision, speed, and versatility of this approach compared to traditional methods. Moreover, the study sheds light on the underlying mechanisms governing the interaction between laser pulses and materials, providing valuable insights for further optimization and applications in emerging fields such as photonics, optoelectronics, and quantum technology.

Keywords AlexNet · Femtosecond laser · Optical materials · Ultrafast laser

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- Artificial intelligence and Data Science Department, Agni College of Technology, Chennai, Tamil Nadu 600130, India
- Department of Chemistry, College of Science, King Saud University, Riyadh 11451, Saudi Arabia

Published online: 14 December 2023

Dr. Ishwarya M. V., Associate Professor, Head of the Department of Artificial Intelligence and Data Science, has published a research paper titled "DEEP LEARNING-GUIDE FEMTOSECOND LASER PROCESSING IN OPTICAL MATERIALS AND DEVICES FOR NANO FABRICATION ADVANCEMENTS" in the SCI journal "OPTICAL AND QUANTUM ELECTRONICS" on December 14, 2023, indexed by SPRINGER.

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Dr. Ishwarya M. V., Associate Professor, Head of the Department of Artificial Intelligence and Data Science, and Ms. Sri Raja Rajeswari P. U., Teaching Assistant and Trainer, Department of Artificial Intelligence and Data Science, have published the book titled "PYTHON PROGRAMMING: FUNDAMENTAL DESIGN PRINCIPLES OF PYTHON." The book was published by Notion Press on December 15, 2023.

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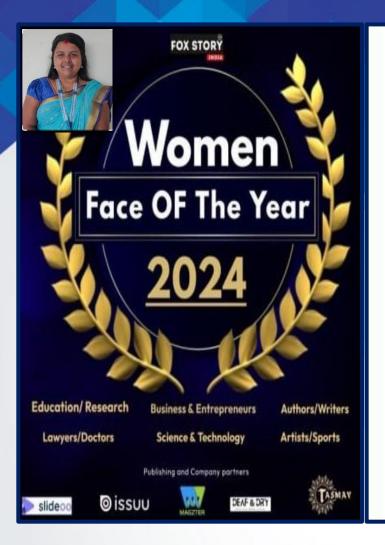
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Dear ishwarya srinivasan

We would like to inform you that your name is forwaded

for Second & Final Round

Fox Story India is a Google-verified Media platform of India. Fox Story India has its official Magazine that has massive online presence and on Demand - print edition.

Women Face of the Year is Femina Oriented Title, brought to you by Fox Story India. We will have 2 edition of the Title & Process starts from JAN 2024. We are looking for Faces that can be inspiriation to readers, viewers and audiences for the complete year of 2024.

Fox Story India List of **Top 100 Ranks First in** Google Search. We have top national media as our partner for publishing our official List. Some of the Major Media's are Zee News, Hindustan Times, Business Standard and many more.

Dr. Ishwarya M. V., Associate Professor and Head of the Department of Artificial Intelligence and Data Science, has been selected for the second and final rounds of FOX INDIA STORY for the award titled "WOMEN FACE OF THE YEAR 2024.".

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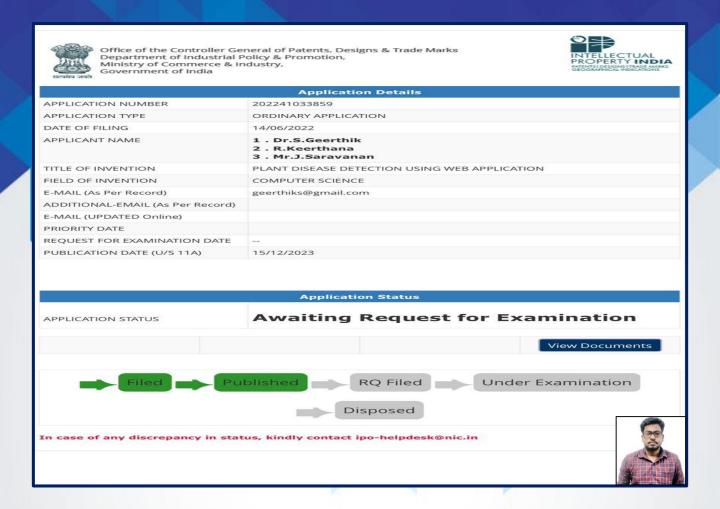


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Dr. S. Geerthik, Head of the Department, Department of Information Technology, published an Indian patent titled "Plant Disease Detection using Web Application" on December 15, 2023.

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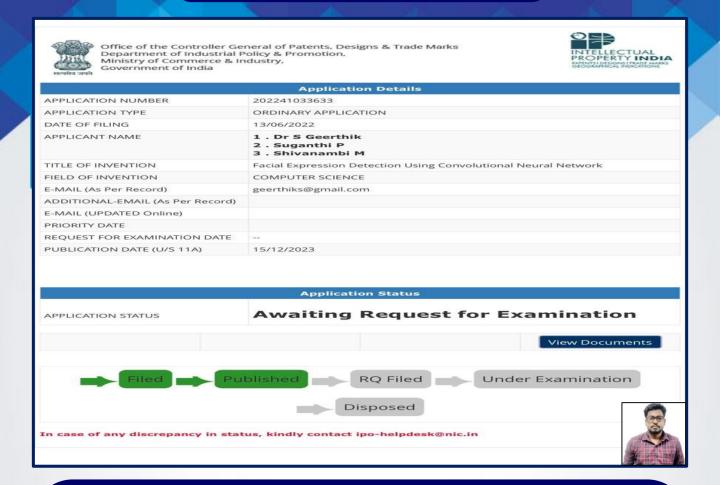


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Dr. S. Geerthik, Head of the Department, Department of Information Technology, published an Indian patent titled "Facial Expression Detection using Convolutional Neural Network" on December 15, 2023.

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STUDENT ACHIEVEMENT



Banupriya K., Department of Electrical and Electronics Engineering, II year, has successfully completed an course on "Introduction to IoT" online Simplelearn SkillUP platform on December 14, 2023.

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STUDENT PARTICIPATION





CERTIFICATE OF COMPLETION

Presented to

Sandhiya Ragu

For successfully completing a free online course

Data Structures in C

Provided by

Great Learning Academy

(On December 2022)

To verify this certificate visit verify.mygreatlearning.com/RZSADQV

Sandhiya Ragu, Department of Electrical and Electronics Engineering, II year, has successfully completed an online course on "Data Structures in C" on the Great Learning online platform on December 14, 2023...

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STUDENT PARTICIPATION



Sachin, IV Year Student, Department of Information Technology, has participated in a 7-days bootcamp in **"Python and Artificial Intelligence"** organized by AWS Community Builders in the month of November 2023.

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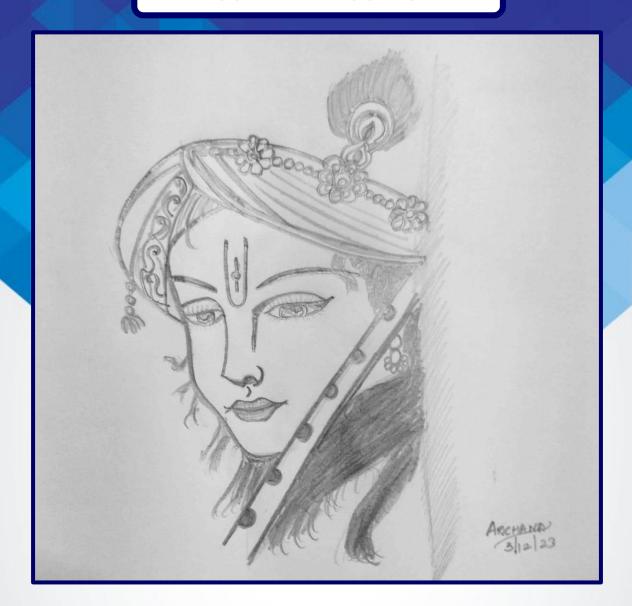
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FACULTY REPOSITORY



Archana S – AP / EEE has captured the face with such detail, and the hairpiece is so beautifully intricate. It's truly a work of art!

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