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ELECTRONICS & COMMUNICATION DEPARTMENT

VISHWAKARMA GOVERMENT ENGINEERING COLLEGE
CHANDKHEDA, AHEMDABAD - 382424

EC NEWSLETTER

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VISION

To create an ecosystem for proliferation of socially responsible and technically sound Electronics and Communication Engineers, innovators and entrepreneurs.

MISSION

- To develop state-of-the-art laboratories and wellequipped academic infrastructure.
- To motivate faculty and staff for qualification upgradation, and enhancement of subject knowledge.
- To promote Entrepreneurship, research, innovation and real life problem solving.
- To strengthen linkages with Industries, academic and research organizations.
- To reinforce concern for sustainability, natural resource preservation and social responsibility.

FACULTY ACHIEVEMENTS

Prof. Jayesh Diwan Invited as an External Expert for interview panel of Scientific Assistant - C at Institute for Plasma Research from 1" March, 2021 to 3 March, 2021 Ahmedabad. He has published a paper on "Review of low power LFSR design techniques" in Multidisciplinary. International Research Journal of Gujarat Technological University. Volume 3 Issue 1-Jan-2021, Online ISSN: 2581-8880.

Prof. Dhara Sangani has published a paper on "A Two stage PAN-Sharpening algorithm based on Sparse representation for spectral distortion reduction". International Journal of Image and Graphics, 2250007

Prof. Rahul Patel conducted course on TI embedded system design using MSP430 MCU MOOC. He has received certificate of appreciation for fostering the ecosystem bridging Goverment, Academia and Industry.

COMPETITIVE EXAM RESULT

Priyank Zaveri
(Sem - 8)
GATE
Marks - 41
(Rank-1440)

Deep Pandya
(Sem - 8)
CAT - 96.51%ile
XAT- 99.23%ile

Simoni Shah
(Sem - 8)
IELTS
Bands - 8

Parth Kachhadiya
(Sem - 8)
IELTS
Bands - 7.5

Anuj Gundani
(Sem - 8)
IELTS
Bands - 7.5

Simoni Shah and Anuj Gudani of Electronics and Communication department published a paper on "Review of low power LFSR design techniques" under guidance of Prof. Jayesh Diwan in Multidisciplinary International Research Journal of Gujarat Technological University, Volume 3 Issue 1 -Jan-2021. Online ISSN: 2581-8880

Covid innovation by VGEC students

Take trial of clothes without wearing them

Four students of Vishwakarma Govt Engg College design AI-based system which displays clothes on user's body; do away with physical trial; system for online shoppers can also be used by retail stores

Niyati.Rana
@ahmedabadmirror.in

TWEETS @NiyatiMIRROR

One of the most alluring experiences of physical shopping is taking a trial of clothes before deciding which ones to buy. However, the Covid pandemic restrictions have robbed consumers of this experience. To bridge this gap, students of Vishwakarma Government Engineering College (VGEC) have designed a digital interface based on artificial intelligence (AI) which allows shoppers to try the clothes of their choice virtually.

The Smart Dresser, as the platform created on Raspberry Pi has been named, displays the most appropriate outfit on its user from a pre-stored image database. It gives them real-time shopping experience and helps choose the most suitable attire.

Smart Dresser has been created by four VGEC students Harsh Shroff, Dishank Jogi, Om Makwana and Rathod Darshan under the guidance of Prof Chintan Dave and Prof Amit Agrawal. The team started working on the platform in November last year with financial assistance from SSIP. The basic model of Smart Dresser has been created to target online shoppers.

Harsh Shroff said, "It is an AI-based system, which will display the most appropriate outfit on a human body from a prestored image dataset. The user can select clothes by swiping left or right. Once the user selects the outfit, he can virtually try it instead of wearing it. This virtual trial is helpful in a Covid pandemic situation. Even in a normal situation, it can reduce human contact with clothes and can help prevent spread of coronavirus. The system analyses the user's choice and displays outfits accordingly."

Once the user selects gender and the occasion for which clothes need to be selected, Smart Dresser clicks the user's photo and displays the outfit on their body. The students are now working to refine their basic model by adding machine-learning to avoid manual input of choices.

They said, "Machine learning will help in automatic suggestions based on the user's height, body and skin tone. We are also extending our image dataset to provide more choices. We are currently implementing the like-button and like-section, which will help stores keep track of most liked clothes and popular choices."

The Smart Dresser: Once the user selects the outfit, he can virtually try it instead of wearing it

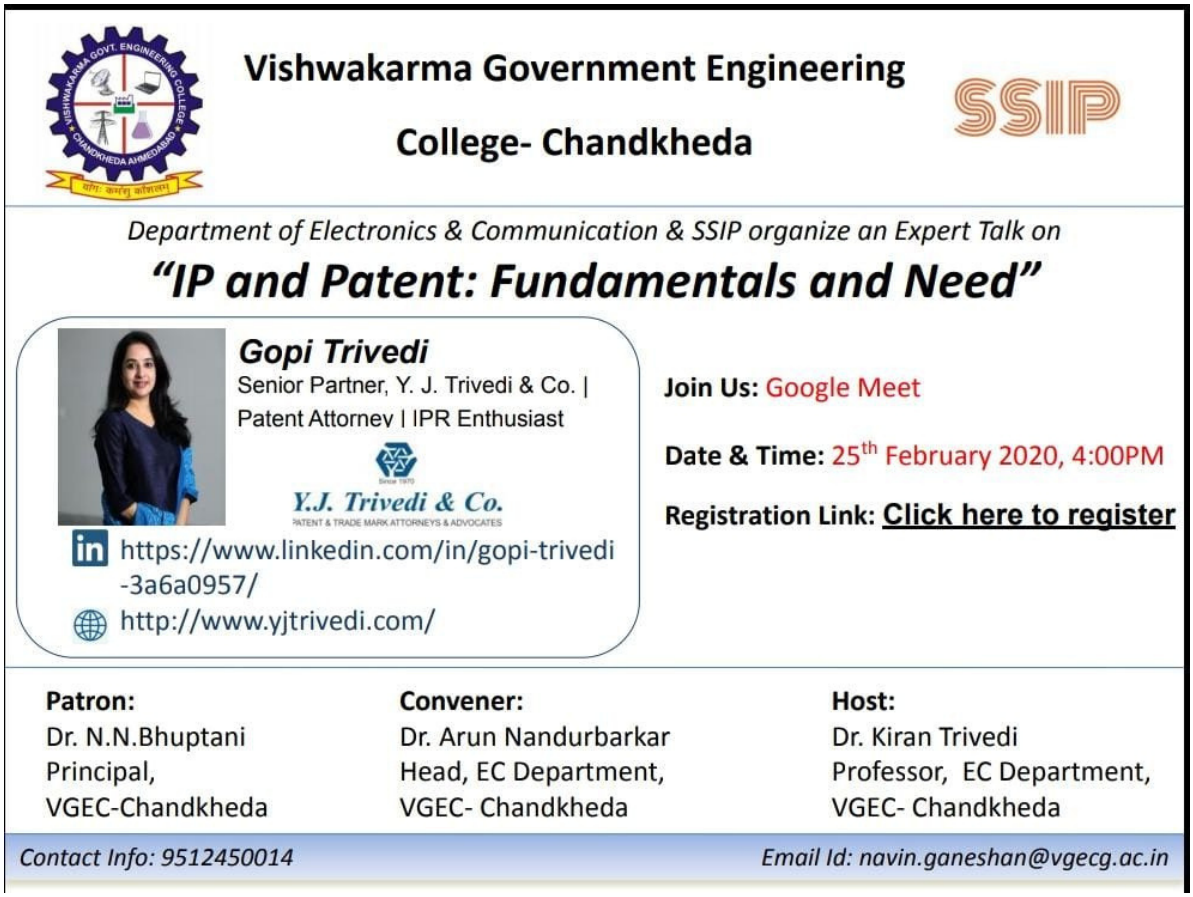
THE INNOVATORS

Rathod Darshan

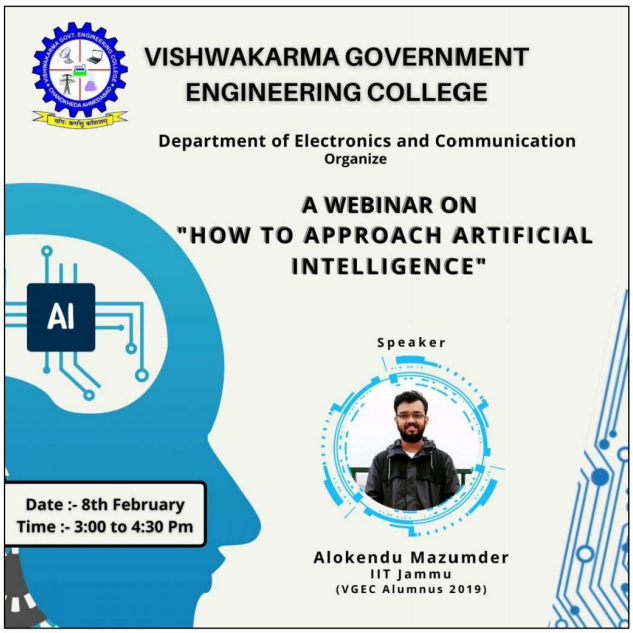
Dishank Jogi

Harsh Shroff

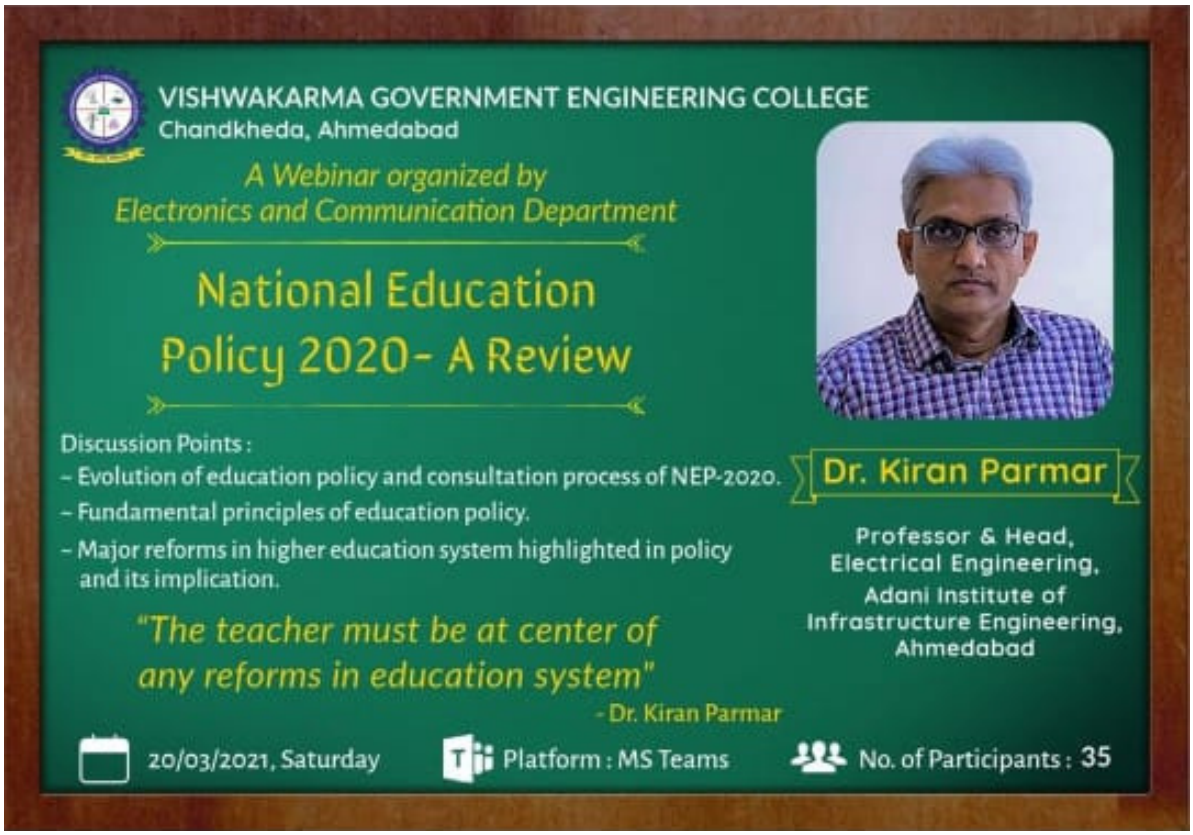
Om Makwana



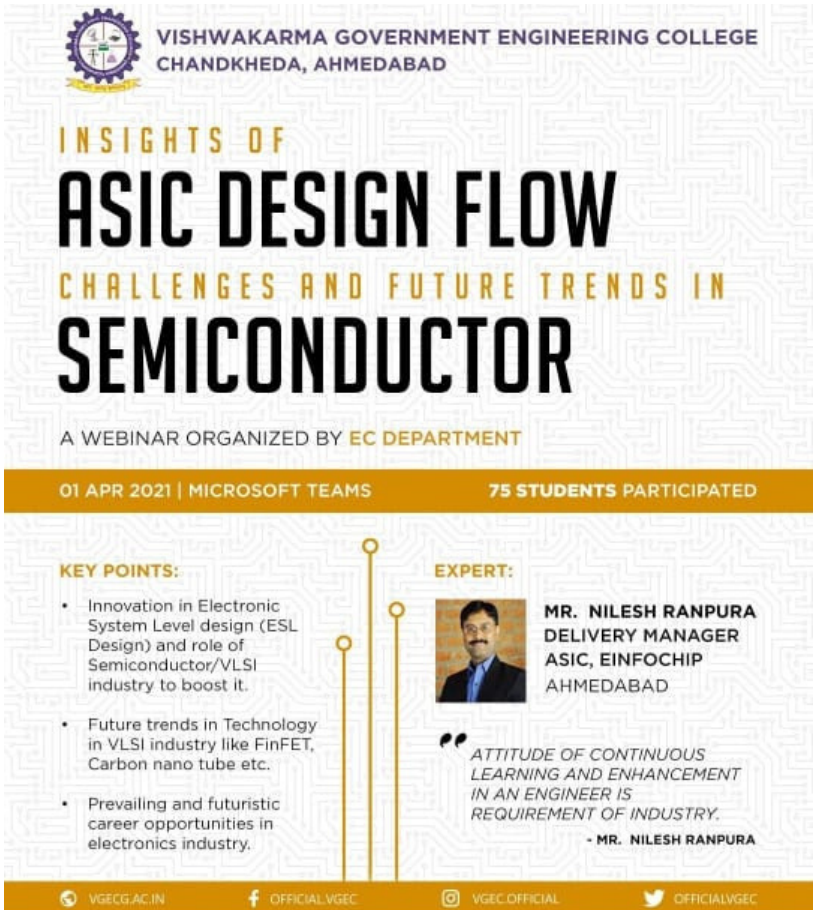
Electronics and Communication Engineer ing Department under SSIP organized an expert talk on "IP and Patent: Fundamentals and Need" on 25th February, 2021 on Google Meet Platform. The Expert talk was conducted by Ms Gopi Trivedi (Senior Partner, Y.J.Trivedi & Co, Patent Attorney and IPR enthusiast) with 139 enthusiastic attendees.



A webinar on "How to Approach Artificial Intelligence" was organized by EC Depart ment on 8 February, 2021. The webinar was conducted to educate the participants about the Artificial Intelligence with a balanced approach between theory and coding part of Al. The speaker Mr. Alokendu Mazumder is 2019 batch pass out student of the EC department.

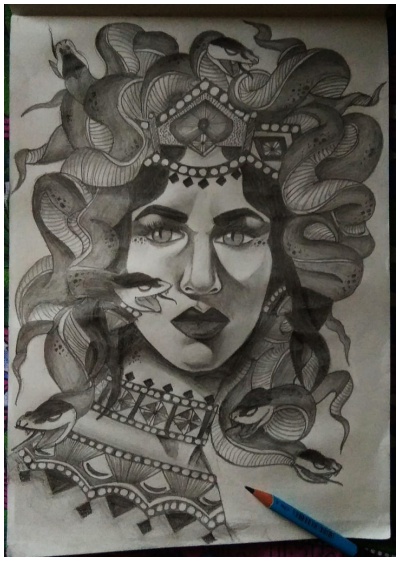


Dr Kiran Parmar, Professor & Head, Electrical Engineering, AllE, Ahmedabad discussed the highlights of NEP-20 and its implications in the higher education system during a webinar on "National Education Policy discussed the highlights of NEP-20 and its 2020-A Review" conducted by the EC Dept on March 20th, 2021.



The EC Department has organized a webinar on "Insights of ASIC Design Flow, Challenges and Future Trends in Semiconductor " on 1st April, 2021 to Make students aware about current and future trends in VLSI domain.

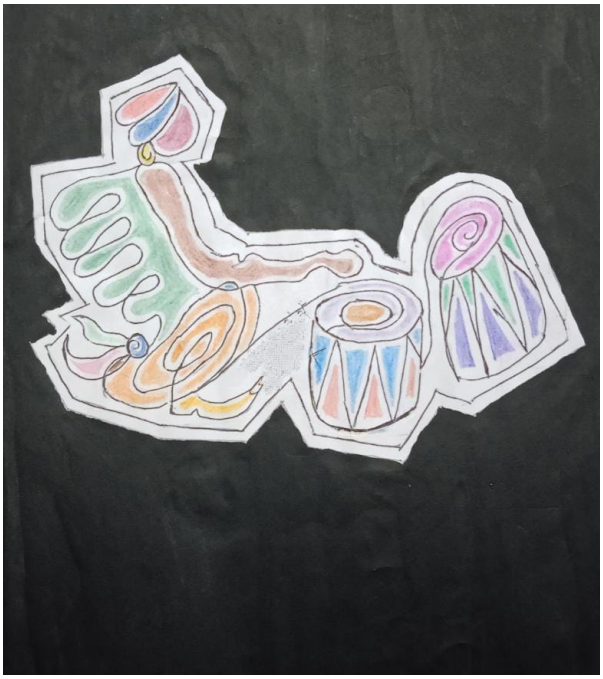
CREATIVE CORNER



Vidhi Suthar (Sem - 6)

Honey Patel (Sem - 6)

Ayushi Shah (Sem - 4)



Shuchi Shah (Sem - 4)

નવકૂટીત કૂંપળો ખીલવાની શાખ પર,
નવપલ્લવ તે લીલું બનવાની શાખ પર.

બાંધી તે લાગણી ઉલ્લાસમય લીલાશ સાથે,
ક્યાં સુધી આમ જ ટકી શકવાની શાખ પર!

ધરાતલ પર આવી કરતી રહી ખખડાટ,
કહેવાની વ્યથા પર્ણોને જે છે શાખ પર.

નવપલ્લવ જે લીલાશમય મોહપાશમા,
દસ્તુર ક્યાં જ્ઞાત કરી શકવાના શાખ પર!

દરેક પર્ણની લઈ એક અનેરી કહાની,
ચક્રવ્યૂહ નિરંતર ગતિમય શાખ પર.
Jhankhana Joshi

Jhankhana Joshi (Sem - 8)