Department of Computer Science and Engineering

National Institute of Technology Delhi

VISION & MISSION

VISION

To communicate quality Computer Science Education for producing globally identifiable technocrats and entrepreneurs upholding sound ethics, profound knowledge, and innovative ideas to meet industrial and societal expectations.

MISSION

1. To impart value-based technical knowledge and skill relevant to Computer Science and Engineering through effective pedagogies and hands-on experience on the latest tools and technologies to maximize employability.
2. To strengthen multifaceted competence, nurture creativity and innovation and create entrepreneurial environment for an ever-changing technological scenario requiring communally cognizant solutions.
3. To create an appetite for research and higher education in contemporary and emerging areas of Computer Science.
4. To inculcate the moral, ethical, and social ideals essential for prosperous nation-building.

Visual Computing & Robotics Lab
(GF Lab No. 14)

Lab Coordinator : **Dr. Gautam Kumar**
Technical Staff : Mr. Vikas Bhardwaj

Courses and Ongoing Research:

- **Computer Vision and Pattern Recognition**
  M. Tech (CSE), M. Tech (CSA) & Ph.D Research Scholars

- **Ongoing research focuses on domain including**
  - DeepFake
  - Animal Biometrics
  - Person Re-identification
  - Healthcare
  - Agriculture
  - Computer Vision and Machine Learning etc.

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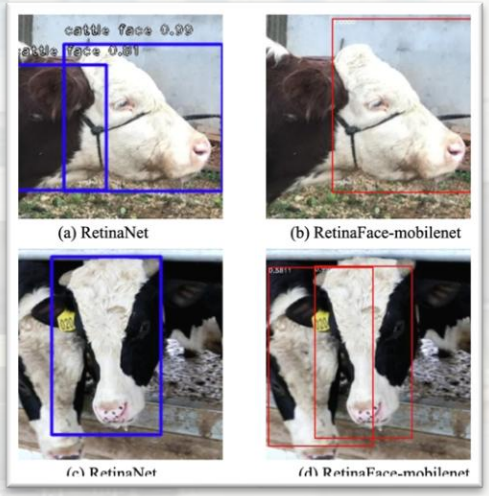

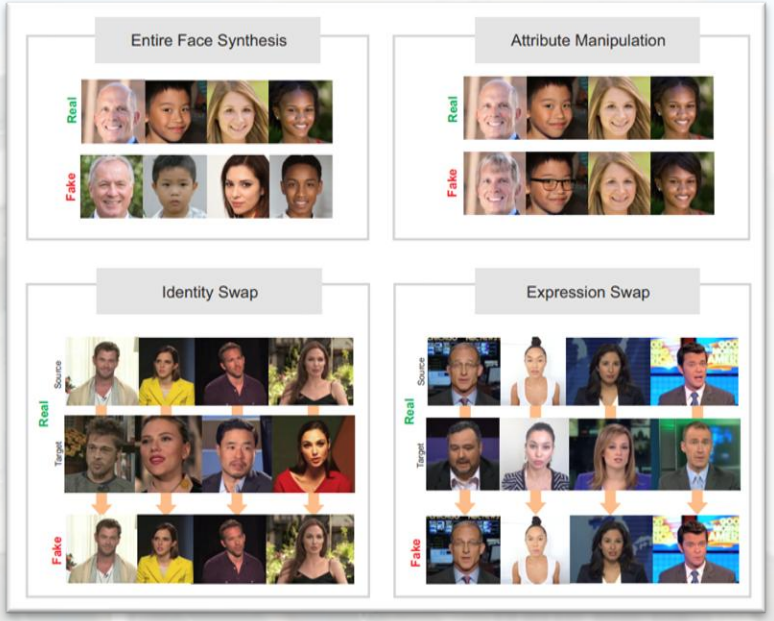

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Equipment Purchased

- **1 Work Station with GPU:** Students can train complex machine learning models which requires large dataset and vast computer memory with excellent processing speed.

Equipments (Tendering in progress)

- **30 Workstations:** Students can design model, simulate them and complete documentation related to their experiments.

- **Robotics**
  - **Raspberry Pi 400**: The minicomputer can connect with other peripheral hardware devices such as a keyboard, mouse, and monitor. Students will get knowledge of developing smart systems using various sensors and Raspberry Pi as computing device.
  - **Humanoid Robot**: Humanoid robots can be used in the inspection, maintenance and disaster response at power plants to relieve human workers of laborious and dangerous tasks.
  - **Mobile Robot**: It can be used in industries especially in warehouses and distribution centres, its functions can also be applied to the medicine, surgery, personal assistance and security. Ocean and space exploration and navigation are also amongst the most common uses of mobile robots.
  - **Mobile manipulator System consisting of** GPU, GPS, Camera Depth Sensor, IMU, 2D Lidar

- **Robotic Arm with 2 Finger gripper:** The 2-Finger Gripper is ideal for Pick and Place, Machine Tending, Assembly and Quality testing. This robot will help students to develop the industry automation related products.

राष्ट्रीय प्रौद्योगिकी संस्थान दिल्ली

NATIONAL INSTITUTE OF TECHNOLOGY DELHI

धन्यवाद | THANK YOU

कंप्यूटर विज्ञानं एवं अभियांत्रिकी विभाग

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