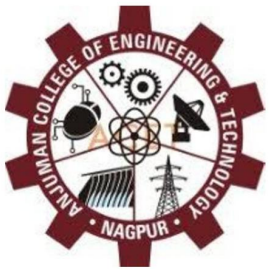
NEWSLETTER

2018 - 2019



COMPUTER SCIENCE & ENGINEERING DEPARTMENT

PROF. M. S. KHATIB
HOD, CSE DEPT.

I am delighted to bring out this seventh issue of "Departmental Newsletter", which provides a platform for students and staff to exhibit their ideas. The major strength of the department is a team work of well qualified and dedicated staff who are continuously supporting the students for their academic excellence.
Computer Science is a fascinating subject it has been widely recognized as an essential source and technique for the advancements in all spheres of human Endeavour now and in future. Computer Science equips our staff & Students with the skills to have a great career ahead in the field of Digital India & Make in India project.

Most of the students have participated in different activities & presented their projects at National level.
Their efforts are appreciable. Our placement records have always been very impressive, with the large number of students being placed year after year in highly reputed companies. Our alumni hold senior positions in industries as well as in academic institutions, both in India and abroad.

I admire the efforts taken by Editorial Board for presenting the thoughts of young engineers.

MESSAGE FROM EDITOR

Prof. Naisha Taban Khan
ASSISTANT PROFESSOR
CSE, ACET

With immense pleasure we are presenting our seventh issue of the Department newsletter. A lot of efforts has gone into the making of this issue. It highlights the events, activities, academic progress, placements, achievements etc.
Each issue of this newsletter is a proud milestone of our events that marks our growth, our imaginations and measures our professionalism. A committed team and enthusiastic students of the department have made this academic year 2018-2019 full of professional events.
I am really thankful to our respected Principal Dr. S. M. Ali and Head of the Department Prof. M.S. Khatib for entrusting me with the responsibility of being a part of the Editorial Board.

UNIVERSITY RANK HOLDERS

SUMMER 2018 - WINTER 2019

AYESHA ALI
3RD RANK (W-18)
7TH SEM - 9.08 (SGPA)

SANJAY RAO
4TH RANK (W-18)
7TH SEM - 9 (SGPA)

SAKINA SADAF
4TH RANK (W-18)
7TH SEM - 9 (SGPA)

ZAHERA ISMAIL
7TH RANK (W-18)
7TH SEM - 8.8 (SGPA)

GAURI MOHATKAR
7TH RANK (W-18)
7TH SEM - 8.8 (SGPA)

MANISH NAIK
7TH RANK (W-18)
7TH SEM - 8.8 (SGPA)

AYUSHI GAWANDE
2ND RANK (W-18)
5TH SEM - 8.96 (SGPA)

SAKSHI GATODE
4TH RANK (W-18)
5TH SEM - 8.89 (SGPA)

MONIKA MAHAJAN
7TH RANK (W-18)
5TH SEM - 8.74 (SGPA)

MAHELAKA KHAN
8TH RANK (W-18)
5TH SEM - 8.67 (SGPA)

KURUP ASHWATHY
9TH RANK (W-18)
5TH SEM - 8.63 (SGPA)

NUSRAT QURESHI
10TH RANK (W-18)
5TH SEM - 8.59 (SGPA)

ZAINAB FIRDOUS
1ST RANK (S-18)
8TH SEM - 9.42 (SGPA)

ALISHA FAZLANI
2ND RANK (S-18)
8TH SEM - 9.31 (SGPA)

PRANAV BHAGAT
4TH RANK (S-18)
8TH SEM - 9.21 (SGPA)

ALFIYA SHEIKH
9TH RANK (S-18)
8TH SEM - 9.04 (SGPA)

PRIYANKA WASNIK
1ST RANK (S-18)
6TH SEM - 9.41 (SGPA)

POOJA MATE
3RD RANK (S-18)
6TH SEM - 9.33 (SGPA)

NEHA MANUJA
9TH RANK (W-18)
6TH SEM - 8.96 (SGPA)

NUSRAT QURESHI
5TH RANK (W-18)
4TH SEM - 9.04 (SGPA)

ASMA SHEIKH
6TH RANK (W-18)
4TH SEM - 8.96 (SGPA)

STUDENT ACHIEVEMENTS

01 MOHD. SOHEL

2nd prizxe - Google CrowdSource.
2nd prize - Debate Competition.
Jury Award - All India Dance Competition.

02 RUNALI SAKHARE, ZOBIYA ALI, SHABE NOOR, SHAHID KHAN

2nd Position - National Conference at Anjuman Collage of Engineering and Technology, Sadar,Nagpur.

DEPARTMENT ACTIVITIES / EVENTS

01 **INDUCTION PROGRAM FOR 1ST YEAR STUDENTS**

13th July 2018
Faculty Co-Ordinator - Prof. almas Ansari

02 **PATRIOTIC SONG COMPETITION ON INDEPENDENCE DAY**

14 th august 2018
Faculty Co-Ordinator - Prof. Abdul Razzaque,
Prof. Manish Assudani

03 **KRANS BODY INSTALLATION**

6th September 2018
Faculty Co-Ordinator - Prof. Ritesh Shrivastav

04 **EDC CELL INAUGURATION**

6th September 2018
Faculty Co-Ordinator - Prof. Anwarul S,
Prof. S. Kaneez Khatoon

05 **NCSS CHAPTER & CYBER SECURITY CLUB INSTALLATION & BODY FORMATION**

15th September 2018
Faculty Co-Ordinator - Prof. Itrat Fatema,
Prof. Kaneez K

06 **"TREE PLANTATION"**

26th February 2019
Faculty Co-Ordinator - Prof.Samina Anjum,
Prof. Farheena Sheikh, Prof. Naveed Zeeshan

FACULTY DEVELOPMENT PROGRAM

DEPARTMENT WAS THE REMOTE CENTER FOR THESE FDP'S

01

FOUNDATION PROGRAM IN ICT FOR EDUCATION -FDP101X (UNDER THE BANNER OF IIT BOMBAY)

Course Schedule: 13 Sept. 2018 to 18 Oct. 2018
Face to Face session:
6 and 7 Oct. 2018

(TEACHING STAFF)
PROF. SADIA PATKA

02

PEDAGOGY FOR ONLINE AND BLENDED TEACHING- LEARNING PROCESS – FDP201X(UNDER THE BANNER OF IIT BOMBAY)

Course Schedule: 25 Oct. to 29 Nov. 2018
Face to Face session:
3 & 4 Nov. AND
17 & 18 Nov. 2018

(TEACHING STAFF)
PROF. SADIA PATKA

03

OPEN SOURCE LIBRARY SOFTWARE KOHA (UNDER THE BANNER OF IIT BOMBAY)

Friday, 12 October 2018.

(LIBRARY STAFF)
PROF. SADIA PATKA
MRS. SHABINA KHAN
MR. SARFARAZ RANA

LOCAL TOURS

01) local visit to Oldage Home

(29 January 2019)
Prof. Itrat Fatema,
Prof. Ritesh Shrivastav,
Prof. Kaneez K
Prof. Imran Ahmed

02) Local Visit to "Apang Kalyan NGO"

(2 March 2019)
Prof. Qudsiya Naaz,
Prof. Saquib Ahmed,
All Subject Teachers &
Mentors

03) Indutrial visit to "Maximess, Software Company in Nagpur, Maharashtra".

(30 March 2019)
Prof. Itrat Fatema,
Prof. S Kaneez Fatima

PLACEMENTS

Number of Companies Visited	Numbers of students Placed	Company with highest package	Highest Package received (LPA)
45	95	TIAA	7

TECHNICAL ARTICLES

DESTROY 5G BEFORE 5G DESTROYS LIFE ON EARTH

"We the undersigned scientists, doctors, environmental organizations and citizens from countries, urgently call for a halt to the deployment of the 5G (fifth generation) wireless network, including 5G from space satellites. 5G will massively increase exposure to radio frequency (RF) radiation on top of the 2G, 3G and 4G networks for telecommunications already in place. RF radiation has been proven harmful for humans and the environment. The deployment of 5G constitutes an experiment on humanity and the environment that is defined as a crime under international law."

Telecommunications companies worldwide, with the support of governments, are poised within the next two years to roll out the fifth-generation wireless network (5G). This is set to deliver what is acknowledged to be unprecedented societal change on a global scale. We will have "smart" homes, "smart" businesses, "smart" highways, "smart" cities and self-driving cars. Virtually everything we own and buy, from refrigerators and washing machines to milk cartons, hairbrushes and infants' diapers will contain antennas and microchips and will be connected wirelessly to the Internet. Every person on Earth will have instant access to super-high-speed, low- latency wireless communications from any point on the planet, even in rainforests, mid-ocean and the Antarctic.

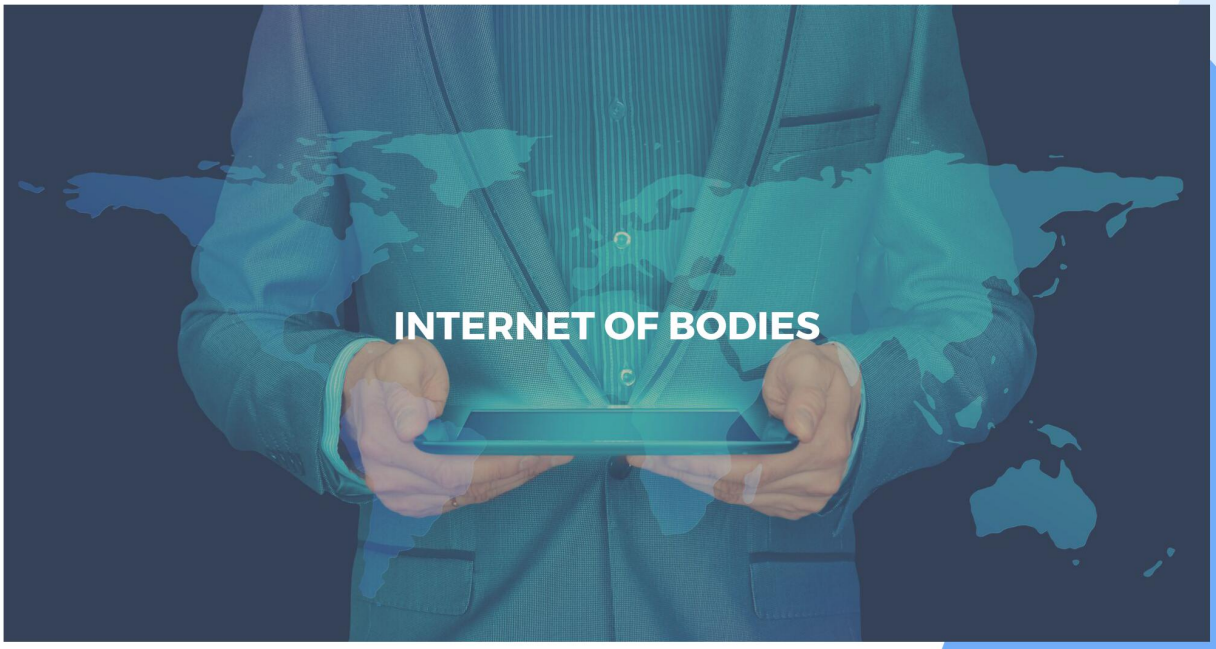
What is not widely acknowledged is that this will also result in unprecedented environmental change on a global scale.

The planned density of radio frequency transmitters is impossible to envisage. In addition to millions of new 5G base stations on Earth and 20,000 new satellites in space, 200 billion transmitting objects, according to estimates, will be part of the Internet of Things by 2020, and one trillion objects a few years later. Commercial 5G at lower frequencies and slower speeds was deployed in Qatar, Finland and Estonia in mid-2018. The rollout of 5G at extremely high (millimetre wave) frequencies is planned to begin at the end of 2018.Despite widespread denial, the evidence that radio frequency (RF) radiation is harmful to life is already overwhelming. The accumulated clinical evidence of sick and injured human beings, experimental evidence of damage to DNA, cells and organ systems in a wide variety of plants and animals, and epidemiological evidence that the major diseases of modern civilization—cancer, heart disease and diabetes—are in large part caused by electromagnetic pollution, forms a literature base of well over 10,000 peer-reviewed studies.

If the telecommunications industry's plans for 5G come to fruition, no person, no animal, no bird, no insect and no plant on Earth will be able to avoid exposure, 24 hours a day, 365 days a year, to levels of RF radiation that are tens to hundreds of times greater than what exists today, without any possibility of escape anywhere on the planet. These 5G plans threaten to provoke serious, irreversible effects on humans and permanent damage to all of the Earth's ecosystems. Immediate measures must be taken to protect humanity and the environment, in accordance with ethical imperatives and international agreements.

SOURABH PHULPAGAR
7-A, CSE

TECHNICAL ARTICLES



With the Internet of Bodies, connected devices from tech companies are now being implanted, ingested and affixed to the human body in ways never before imagined. And these connected devices are simultaneously generating tremendous amounts of data about our behaviours, our physiology, and even our DNA. Examples of Internet of Bodies innovations include smart contact lenses that are able to monitor glucose levels, artificial lenses used to correct vision, Bluetooth-equipped electronic pills, digital tattoos, and even Fitbit devices that monitor and analyse very intimate profiles of your health and physiological functions.

Of course, as currently being used, these connected devices are all part of a broader effort to improve human health and not part of a strategy to intrude on personal privacy. The reason why you wear a Fitbit is not because you want someone tracking your every move; rather, it is because you are trying to improve your overall health and wellness. The same is true of other Internet of Bodies initiatives, such as Google's Project Baseline, which has the purely altruistic goal of "mapping human health," or India's creation of a countrywide biometrics database.

NUSRAT FATEMA SYED
7-B, CSE

TECHNICAL ARTICLES

White Hole: Black Hole's Neglected Twins

This visualization shows a jet blasting from a black hole near the speed of light. In theory, a white hole looks similar to a black hole, but instead of sucking matter in, a white hole pushes matter away.

White holes were long thought to be a figment of general relativity born from the same equations as their collapsed star brethren, black holes. More recently, however, some theorists have been asking whether these twin vortices of space time may be two sides of the same coin.

To a spaceship crew watching from afar, a white hole looks exactly like a black hole. It has mass. It might spin. A ring of dust and gas could gather around the event horizon — the bubble boundary separating the object from the rest of the universe. But if they kept watching, the crew might witness an event impossible for a black hole — a belch. "It's only in the moment when things come out that you can say, 'ah, this is a white hole,'" said Carlo Rovelli, a theoretical physicist at the Centre de Physique Theories in France. Physicists describe a white hole as a black hole's "time reversal," a video of a black hole played backwards, much as a bouncing ball is the time reversal of a falling ball. While a black hole's event horizon is a sphere of no return, a white hole's event horizon is a boundary of no admission — space-time's most exclusive club. No spacecraft will ever reach the region's edge.

Objects inside a white hole can leave and interact with the outside world, but since nothing can get in, the interior is cut off cut off from the universe's past: No outside event will ever affect the inside. "Somehow it's more disturbing to have a singularity in the past that can affect everything in the outside world," said James Bardeen, a black-hole pioneer and professor emeritus at the University

Why white holes might exist:

For a while, white holes seemed to share the fate of wormholes — mathematically permissible contortions of space-time likely prohibited by reality. But in recent years, some physicists have brought white holes back in an attempt to save their darker siblings from an unseemly death. Ever since Stephen Hawking realized in the 1970s that black holes leak energy, physicists have debated how the entities could possibly shrivel up and die. If a black hole evaporates away, many ask, what happens to the internal record of everything it swallowed? General relativity won't let the information out and quantum mechanics forbids its deletion. "How does a black hole die? We don't know. How is a white hole born? Maybe a white hole is the death of black hole," Rovelli said. "The two questions join nicely, but you have to violate the general relativity equations in the passage from one to the other."

TECHNICAL ARTICLES

Rovelli is a founder of quantum loop gravity, an incomplete attempt to move beyond general relativity by describing space itself as built from Lego-style particles. Guided by tools from this framework, he and others describe a scenario where a black hole grows so small that it no longer obeys the common-sense rules of stars and billiard balls. On the particle level, quantum randomness takes over and the black hole could transform into a white hole.

The ultimate white hole

Alternatively, the aftermath of a white hole may exist everywhere. To black hole physicists, the Big Bang's explosion of matter and energy looks like potential white hole behaviour. "The geometry is very similar in the two cases," Haggard said. "Even to the point of being mathematically identical at times."

Cosmologists call this picture the "the Big Bounce," and some seek characteristic white hole features in the universe's earliest observable light. Rovelli also wonders if violent radio bursts represent the cries of theoretical mini black holes left over from the Big Bang as they make an early transition into white holes (although this explanation appears increasingly unlikely).

JAFAR SHEIKH
7-A, CSE