



25 YEARS OF CELEBRATION



National Education Society® J.N.N College of Engineering, Shimoga-577204

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NAAC - 'B', UG programs: CE, ME, ECE, EEE, CSE, ISE, ETE accredited by NBA:
1.7.2019 to 30.6.2022 Affiliated to VTU Belagavi, Recognized by Govt. of
Karnataka,



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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COSMOBYTE

2021-22

Message from HOD



Dr. Poornima K M

Dear Students Greetings to you.

I feel proud and honored to lead such an active and energetic department. The major strength of the department is a team of well qualified, experienced and dedicated faculty who are continuously working and supporting the students for their excellence in academics, sports and cultural activities.

I am very happy that, our CS&E department is releasing annual magazine COSMOBYTE after two years of Covid-19 pandemic situation. This magazine gives an insight into the range and scope of the imagination and creativity of our students. My heartfelt congratulations to the entire team for their efforts in bringing out the department magazine.

No one reaches a peak of the hill just by looking at, one who has determination and stamina and to go through the total toil will reach the pinnacle.

My dear students I wish all the very best for your future endeavors.

VISION

To be one of the pre-eminent departments to provide technical and knowledge based education, utilizing the potential of Computer Science & Engineering to meet the ever changing needs of industry and society.

MISSION

- * Mould the students to meet the emerging challenges of industry and society.
- * Emphasizing on research.
- * Effective industry interaction for the development of state of the art technological infrastructure and faculty component.

PROGRAM EDUCATIONAL OBJECTIVES GRADUATES OF THE PROGRAM :

PEO -1	Would be able to identify real world problems and solve them effectively using comprehensive knowledge of computer science.
PEO -2	Would be able to become entrepreneur, pursue higher education and carry out research.
PEO -3	To work in changing environment with ethical and social responsibilities.

PROGRAM SPECIFIC OUTCOMES

PSO -1	Apply concepts in the core areas of Computer Science & Engineering – Networking, Data Structures, Computer Architecture, Mathematical Modeling and System Programming to address technical issues.
PSO -2	Design and develop computer based systems by applying standard practices and principles using appropriate tools and programming languages for real world problems.

Students Creative Section

WEATHER CHANGES, SO DOES LIFE!

-Shrestha S Bharadwaj, 8th 'B'

The nature never ceases to surprise
Deadly hot yesterday, pleasantly cold today
When we are almost adjusting to one, zapp....it changes!
Peksy a few times but mostly entrancing.

Life is no different.

With its myriad twists that it throws each day
And our moods respond to it like chameleons.
No day is the same. No season can guarantee.

If only we can stand strong embracing what comes our way,
Welcoming it with enthusiasm and curiosity.
Will we really find the beauty of nature and oh yes..LIFE

Until you become so strong,
Just chill and enjoy,
The hot, The cold , The monsoon...
The challenges, the success, the boring prep days...

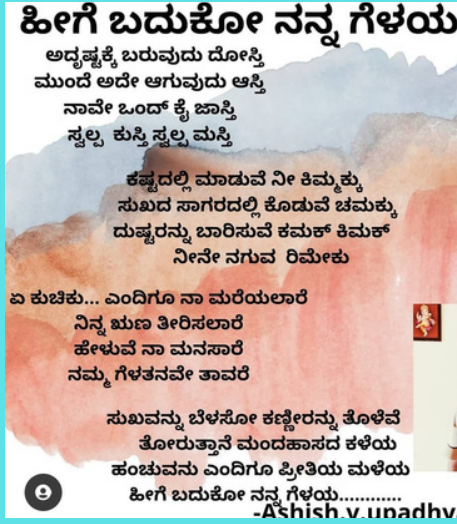
We only enjoy the chill, after a steamy hot period, don't we?
Tuning into delightful music and forgetting yourself for sometime,
Be it Khuda Jaane for warmth,
Falak Tak Chal for chills,
Or Pavizha Mazha for the rain...

Its all about how you Dance with Flow than just going
YOLO they say, but live every moment
Live to the fullest, to the happiest ,to the calmest...

KARNATAKA

-Tazeem Rashid, 8th 'A'

Where my mind goes beyond its level,
Where it's all between Earth and Heaven,
Where I can see dreams handwoven,
It all lies here, on the land of bevel.
The land of sages, the land of Art,
Karnataka has always played it's part,
Beauty with brain, well! Let's keep apart,
Cultural heritage is also in its cart.



ಆ ಹಂಪಿಯ ಸುಂದರ ಶಿಲ್ಪವು ನೀನು

-Nandish D,4th 'A'

ಆ ಹಂಪಿಯ ಸುಂದರ ಶಿಲ್ಪವು ನೀನು...
ಆ ಶಿಲ್ಪಿಯ ಯೋಚನೆಯ ಕದ್ದ ಬ್ರಹ್ಮನು ಆ ಶಿಲ್ಪಕೆ
ಮಾನವ ಜನ್ಮವ ಕೊಟ್ಟ.....
ಆ ಕಣ್ಣ ಕಾಡಿಗೆಯ ಅಂಚಲಿ ಸಪ್ತ ರತಿಯರ
ನಾಚಿಸೋ ಸೊಬಗನಿಟ್ಟು...
ನಾಸಿಕವ ಗಂಧದ ಕಡ್ಡಿಯಲಿ ಕೆತ್ತಿ... ಆ ತುಟಿಗಳಲಿ
ಹೊಂಗಿಯ ಹೂವು ಬಿತ್ತಿ... ಬೆಳಗು ನೀ ಆ
ಹುಣ್ಣಿಮೆಯ ಚಂದ್ರನಂತೆಂದು ಭೂಮಿಗೆ ಬಿಟ್ಟು..



-Ashish V Upadhy,4th 'A'

EMBRACE OF THE RAVEN

The night sky hums a lullaby to put thou to sleep,
While the dear moon peeks to check on thee.
Words unspoken, sobs swallowed, a
heartbreak shoved into the unseen hollows;
For the chirping insects try to speak words of
comfort,
As thee bleed thy heart out in the embrace of
the raven hours.
The pillows reassure thou of better times as
they wipe the saline tears
And the bed lulls thee to a slumber into a
world void of your misery and fears.

ALL THAT REMAINS

The snow storm that had stopped by, took
away all the warmth with it. As the blazing sun
melted the snow next day, I lost all traces of
your footsteps in them. The screeching of
tyres was all I heard, As they made their ways
back home. The unannounced rain startled
the brooding silence, Shooing away the
melancholy of my loneliness. As the fogged up
window glass clears eventually, All that
remains is your name that I traced on it.

-Shreya Bhardwaj,4th 'A'

BLOCKCHAIN TECHNOLOGY

-Amith, 8th 'A'

Blockchain technology is a kind of distributed ledger technology that stores data in a chain data structure. [t is a new distributed infrastructure and computing paradigm, which employs the distributed node consensus algorithm to verify the transaction data and further synchronize the entire network, as well as uses cryptography to ensure data security and credibility.

The rich application scenarios of blockchain are basically based on the four core technologies of blockchain, namely, consensus mechanism, data structure, cryptography, and distributed storage. As the key future research direction of blockchain technology, cross-training technology has gradually become one of the core technologies of blockchain.

Blockchain constructs a distributed point-to-point system, which is a secure and verifiable mechanism for decentralized transaction validation and is widely used in financial economy, Internet of Things, large data, cloud computing, and edge computing. On the other hand, artificial intelligence technology is gradually promoting the intelligent development of various industries. As two promising technologies today, there is a natural advantage in the convergence between blockchain and artificial intelligence technologies. Blockchain makes artificial intelligence more autonomous and credible, and artificial intelligence can prompt blockchain toward intelligence. In this paper, we analyze the combination of blockchain and artificial intelligence from a more comprehensive and three dimensional point of view. We first introduce the background of artificial intelligence and the concept, characteristics, and key technologies of blockchain and subsequently analyze the feasibility of combining blockchain with artificial intelligence. Next, we summarize the research work on the convergence of blockchain and artificial intelligence in home and overseas within this category. After that, we list some related application scenarios about the convergence of both technologies and also point out existing problems and challenges. Finally, we discuss the future work.

The following as the top blockchain benefits:

1. Trust

Blockchain creates trust between different entities where trust is either nonexistent or unproven. As a result, these entities are willing to engage in business dealings that involve transactions or data sharing that they may not have otherwise done or would have required an intermediary to do so.



Decentralized structure

Daniel Field

Blockchain really proves its value when there's no central actor who enables trust, explained Daniel Field, head of blockchain at UST, a global provider of digital technology and services.

Improved security and privacy

The security of blockchain-enabled systems is another leading benefit of this emerging technology.

Reduced costs

Blockchain's nature also can cut costs for organizations.

2. Speed

By eliminating intermediaries, as well as replacing remaining manual processes in transactions, blockchain can handle transactions significantly faster than conventional methods.

NON-FUNGIBLE TOKEN

—Moin Mirza, 8th B'

NFTs have been a speculative investment, and they have drawn criticism for the energy cost and carbon footprint associated with validating blockchain transactions as well as their frequent use in art scams.

NFTs are mostly used in digital art, as a common use case for NFTs. High profile auctions of digital art as NFTs have received considerable public attention, with "Merge" by artist Pak being the most expensive auction at the US \$69.3 million in 2021.

Above we have discussed NFT in brief, now let's see what is the benefit of buying and selling NET. NETS allow creators to make money directly from their work. It eliminates middlemen and allows the artist or the original creators to interact directly with their customers. This model benefits the creators by allowing them to earn a commission each time the NFT exchanges hands. Technically all NFTs are collectibles. They are unique and only one of each can exist. Upon buying them you can hold on to them and their value will increase over time.

Most people will get involved with NFTs for the prospects of making money. There are a lot of people earning a living from reselling them. Investing in NETs for their resale value can lead to huge profits. Some of these collectibles have been resold for more than 20,000 USD while only a few thousand dollars were invested by the original buyer. By reselling, they made over 15,000 USD in just a trade!. The metadata on the token can never be altered by anyone. Also, it can neither get erased, misplaced nor be removed from the blockchain. Basically, they are meant to last forever as their data will always remain as is. This in itself, gives them collectability and high value. One of the greatest advantages of the N F T technology is that it allows artists and content creators to retain their full copyright. This is uncommon in most licensing agreements. This allows them to still generate revenue without giving up their copyrights. When it comes to NFTs, you can be assured of security. The blockchains are decentralized in nature, which means that the data they hold is hosted in different nodes around the globe. There is always an identical record of the database at each of the nodes. Even when the network is down, there is always going to be a record of it somewhere. The NFT technology gives you an assurance in knowing that no matter what happens to the blockchain itself, there are always nodes running. Thus nothing can really happen to the data. This is not only because of the amount of money they make but also the amounts they secure.

GESTURAL INTERFACE

—Pooja Bedre, 8th 'B'

Sometimes life imitates art. Take for example, that scene in the 2002 science fiction film 'Minority Report', where Tom Cruise uses specially designed gloves to maneuver content around wall-sized computer screens just by waving his hands. That is totally doable, said.

Mike Friedel, director of sales for Oblong Industries. The company's CEO, John Koffler, was science adviser to Steven Spielberg for the sci-fi film. While Oblong's product uses a wand rather than gloves, the premise is essentially the same. Gestural technology seeks to adapt the user interface, to make it more effective, more flexible, more intuitive. The user may interact with a computer monitor, a white board or a big array of screens. Commands may be conveyed through gloves or a wand or simply by waving a pattern in the air. This creates a new dynamic for presentations. Instead of having to click and-drag on a screen, "now you can grab something, resize it and bring it into the picture from some other place, with simple gestures," said



More than mere convenience, the promise of gestural tech lies in its ability to give people freer access to the vast volumes of data that are growing up in the public realm. "People carry around massive amounts of data on smartphones and tablets and laptops. But can you really solve big problems on a smartphone? No. You need better access to that information," he said. "Sometimes you need access to multiple streams of information, and the ability to manipulate that data is key. It's not just about having the information. It's about being able to combine that data, to cut and paste it and to share it." This raises interesting possibilities for government, said Michael Hong, principal at global management consulting firm A.T. Kearney.

When combined with virtual or augmented reality, the technology could open the door to smoother, more effective citizen services. Gestural technology could also help government to better serve those with disabilities. "These are customized, instantaneous, personalized experiences. If someone can move their fingers or arms and you have sensors that pick up on that, now they can interface and engage with government in ways that they haven't been able to in the past," he said. Gestural tech could bring new challenges too, as for instance with the auto industry's interest in establishing hand gestures as a way to simplify the control interfaces in a car.

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-Ashish V Upadhya,4th 'A'

ನೀವು ಆಡಿಸಿದ ಬೊಂಬೆಯ ಆಟ
ಇತಿಹಾಸದಲ್ಲೇ ಅಳಿಯದ ಪುಟ
ಚಿತ್ರರಂಗಕ್ಕೆ ನೀವೇ ವಿರಾಟ
ಅಭಿಮಾನ ನಿಮಗೆ ಕಿರೀಟ

ಹಂಗಾಮಿ ನಿಮ್ಮ ಹಿಡುವಳಿ
ನಿಮ್ಮ ಜನಬಲ ತೋರಿಸಿದ ಗೋಕಾಕ್ ಚಳುವಳಿ
ರಸಿಕರರಾಜ ಅನ್ನುವ ಬಿರುದು ನಿಮ್ಮ ಬಳಿ
ಗಾನ ಗಂಧರ್ವರ ಮನಸ್ಸು ಬಂಗಾರದ ಪುತ್ಥಳಿ

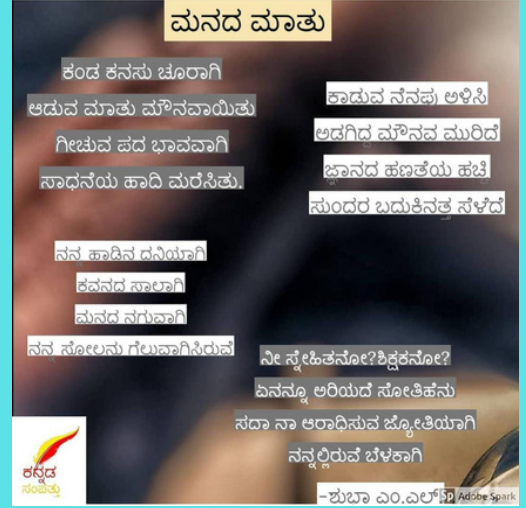
ನಿಮ್ಮ ಜೀವನದಲ್ಲಿ ನೀವು ಪರಮ
ನಿಮ್ಮ ಹೆಸರಲ್ಲೇ ಸಾರ್ವಭೌಮ
ನಟನೆಯಲ್ಲಿ ನಟಸಾರ್ವಭೌಮ
'ಸಂಗೀತದಲ್ಲಿ ಸಂಗೀತಸಾರ್ವಭೌಮ

ನಿಮ್ಮ ಶಿಸ್ತು
ನಿಮಗೆ ಸಂಪತ್ತು
ನೀವು ಮಾಡಿದ ಅಳಿಯದ ಗುರುತು
ಜನರನ್ನು ಮನರಂಜಿಸುವ ಧೂಮಕೇತು

ಬದುಕು ಚಪ್ಪಾಳೆ ತಟ್ಟಿ

-Vidyashree B S,6th 'B'

ಬದುಕು ಚಪ್ಪಾಳೆ ತಟ್ಟಿ
ಪ್ರೀತಿ ಶಿಳ್ಳೆ ಹೊಡೆದದ್ದು ನೀ ಜೊತೆಗಿದ್ದ
ಗಲಿಗೆಗಳಲ್ಲಿ ಮಾತ್ರ...
ಈಗಿನ ವರ್ತಮಾನದ ಸುದ್ದಿ ಕೇಳು
ನಾನೆಂದರೆ ಲೋಕದ ಪಾಲಿಗೆ ಮೌನ...!



-Shubha M L,6th 'B'

Artist's Gallery





-Smruthi Bhat,8th 'B'



-Soujanya N D ,6th 'B'



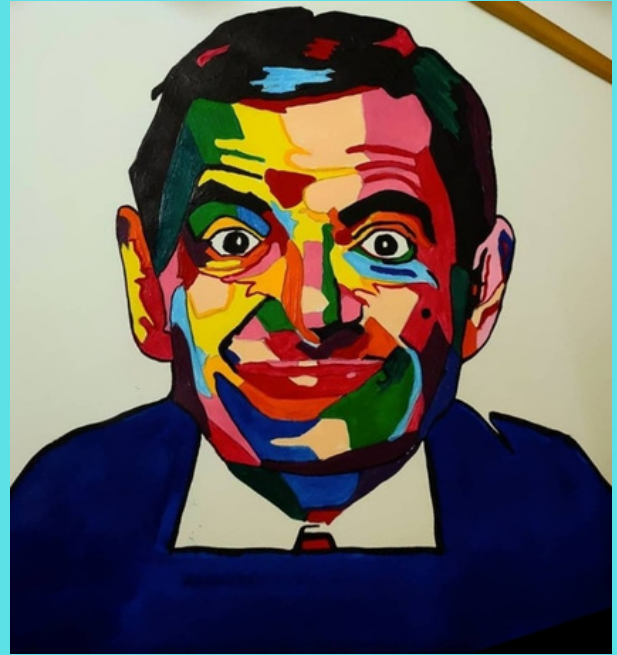
-Neha C B ,8th 'A'



-Vaishnavi M R ,8th 'A'



- Pratheeksha G,4th 'B'



-Keerthana Reddy .8th 'B'

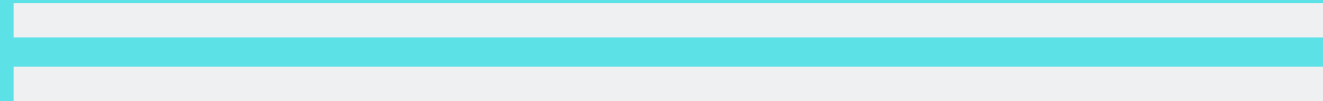
We Are The Champions!!



**Cosmos 2021-22 Inaugural
Function** ✨ ✨



It's Quiz Time!!! 🤔



**YOUR POTENTIAL, OUR PASSION
-MICROSOFT**

**WEBATHON 2.0 BY MICROSOFT STUDENT
AMBASSADORS**



Anveshana-2022

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Department of Computer Science & Engineering
The IEEE student branch, in collaboration with COSMOS, Department of CS&E, J N N College of Engineering, Shivamogga is happy to invite you for the Inter-Department technical fest - 2K22.

Internal Quality Assurance Cell

ANVESHANA
spill the beans
Technical Fest - 2022

Win Cash prize upto Rs.18,000.00
Grab Attractive Swags and also the IEEE Certificates.

Date: 12.01.2022
Free Registration

Events

- Clash of Codes:** A program statement will be given for which logic should be built and the given test cases should be satisfied within the specified time period.
- Cryptic Monks:** This is purely based on puzzles and patterns, and should be solved within the specified time limit.
- UI/UX Design:** Participants have to design an user interface for the specified application within certain time limit.

For Registration:

<https://tinyurl.com/Anveshana2K22>

Dr. Peernima K. M. PROFESSOR, CE, JNCE, Shivamogga
Dr. M. M. Rajesh Hegde Dean, Shivamogga, JNCE, Shivamogga
Dr. Manjunath P. Dean, Shivamogga, JNCE, Shivamogga
Dr. K. Nagendra Prasad Principal, JNCE, Shivamogga



Avishkaar-2022





**Photobooth Designing and
Paper Dress making**



Board Decoration

No Bag Day



Traditional day





8th 'A'



8th 'B'



6th 'A'



6th 'B'



4th 'B' Cricket champions



4th 'B' Football champions

Students achievers in VTU fest



Sports Achievers!!



Cultural fest Achievers!!

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