

VIDAYAM



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BY DEPARTMENT OF ELECTRONICS
AND TELECOMMUNICATION ENGINEERING



Department of Electronics and Telecommunication Engineering

VISION AND MISSION OF THE DEPARTMENT

Department Vision:

- To emerge as a leading source for Electronics and Telecommunication engineering, fostering globally proficient engineers to meet the demands of evolving industry and society.

Department Mission:

- Foster collaboration with industry to facilitate the acquisition of cutting-edge technologies and contribute to the generation of up-to-date knowledge, enhancing employability and sustainability.
- Encourage innovation, research, and development, creating an environment conducive to higher education, entrepreneurship, and lifelong learning.
- Cultivate leadership qualities infused with social and ethical values, providing a platform for their development.

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ENTC<<



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Writer's Block

Literature Section



VIDAYAM
April 2022



LOVE YOU TILL DEATH

~Kashish Mehta

The sun rises as a canopy of gold, bright amid the blue, bidding the stars to take their night rest. As the darkness surrenders, every colour changes from tinges of charcoal to vibrancy sunlight comes as woven strands, free and united, flowing into a day it reveals and solidifies, making the world of our mighty dreams something so beautiful. Each tree is a masterpiece, each wand of grass is something magical. And this is our world, our normal everyday world, the present with each sunrise that we can marvel or ignore, the choice is ours, it always was.

But William would always marvel at it, he knew its value. A person who doesn't get a thing always knows its value. The air vent was the only thing keeping him connected from the outside world. Oh, how he had forgotten the look of mountains and the feel of grass underfoot! In this cell, which was now his home, he only knew when it was daylight by the slim shaft of light that penetrated the air vent on top. He wished to God it was a little bigger. The only other way out is the door, thick oak, new and strong. It's out of place against the metal walls, but it's common now.

Once his cell was a rehab centre, a place where psychiatrists probed the minds of the deviants. Now, it's just a place to rot. He would have indeed, if he hadn't got his beautiful wife with him there. He loved her like she was the last of his kind. It was as if she spoke the same language as him, yet no one was able to. To be around her was like finally not being alone – because now it seemed like all his life he'd been isolated in this cell



– and then suddenly because of her, it seemed as if strolling over a summer meadow.

After all, he'd been in this cell for this long only because of her – she was sick, couldn't even get out of bed by herself anymore, and he wasn't so selfish to enjoy his life while his wife cut through her days sleeping on the bed waiting for death. Love boosts the immune system, and even when she got the medicine, he kept her in his heart; otherwise, she would leave and pass on. He gave her reasons to stay, reasons to fight, and was ready to forgive her if she chose to leave. But he knew, even though she was sick at this moment, there were beautiful moments waiting ahead.

He came beside her, staring at her quiet and still but lovely face which was shimmering against the sunlight. He admired her, nostalgia took over him as he recalled the moments they had spent together: the first time they met, how they started talking, how he proposed to her, how she went all red and gifted him with a shy 'yes'. A smile took over his face without notice as he shifted his attention to her hair. Her hair moved due to wind as if it felt the need to add an exclamation point to her cuteness.

He moved his fingers across her hair, the soft curls fell in cinnamon swirls to a face that was sweet as a white chocolate button. When she didn't show any movements, he called her out, "Anna, come on now, don't you need to wake up? The doctors would be here any moment now." Sickness can be a terrible thing, he thought to himself. How she used to wake him up by planting a soft kiss on his forehead when she was full of life – when the sickness hadn't invaded her.

The approaching footsteps clip-clopped down the bleached little hallway. He couldn't imagine a doctor wearing such impractical shoes, and he was right. As the clattering noise came to a halt, the secretary poked her head around the corner to the small see-



-through window through the door and informed him about the approaching doctor.

His footsteps echoed sharply around the deserted square, sounding overly loud in his own ears, like the bouncing heartbeat of a condemned prisoner as he cleared the clutter of the vessels of yesterday's night. Along with this, he called out to his wife once again, "Love, you'll need to get up now. See, the doctors are coming to check you. I know you are tired, but you'll have to get up for the check-up, alright?"

Knock! Knock! Knock!

Knocks there came thrice, strong and loud, and so the door was opened wide. The doctor had the posture of a soldier. Every action he took was precise and purposeful. He smiled in the cold and distant way professionals do. William could never relax around such expressions. He needed a genuine face, preferably a smile, but if not, he'd rather they didn't take it. Through the examinations, the doctor gave commands rather than requests. The nurse had hovered two feet behind, her relaxed expression of earlier replaced with a grim slash for a mouth and knitted brows.

After checking Anna, the doctor checked William, as always. The nurse and doctor then murmured among themselves, too slow for William to hear it. After a bit of internal discussion, the doctor approached him as the nurse changed a few medicine bottles, and brought fresh-packed water bottles along with a dish of breakfast.

"How's Anna, doctor?"

"The condition's still the same, we'll be changing the medicines and observing for a few months. Let's hope for the best, but, more than Anna, you need to take care of yourself".



As William shot the doctor a confused look, before he could ask anything else, the doctor continued, “otherwise who would take care of her?”

The confusion disappeared from his face and he replied with a short smile, “Sure”. Then, he turned to his wife, “See Anna? You need to take care of yourself more, okay? Now come on, we’ll have breakfast together.”

When the prodding was over, the doctor dropped his eyes to the covers in anticipation of him speaking to William, but when he raised them again, the room was quite empty, they weren’t even in the corridor. His hands stretched over the cold linen like an infant in search of a comforting boy and closed on the thick door.

As the doctor and the nurse came out from the cell through the corridor, a man dressed in khaki clothes with three shiny stars on his shoulder, with a cap on his head and a bamboo stick in hand appeared. He gave a short smile and said, “Hello doctor. How is the patient now?”

“Hello, inspector. The patient is still in the same condition.”

After a short pause, the doctor spoke up, “looks like he loved his wife very much.” While he, the nurse and the police inspector started walking towards the entrance gate of the mental asylum.

“Then why did he kill her two years ago?” Questioned the police officer.



I CAN'T CHANGE



Y'all say I have a
negative vibe
Yes, I do.
I have a negative
way of living
I am a defeatist
At least I don't keep
expectations
From life, from people, from myself
My broken heart doesn't break again
The pain is less
I have numbed all my
feelings,
to the core where even if it
hurts
The agony is known
The soreness feels like
home
Like it will be with me till
the end
Where no one else will
accompany me
The burnt scar will always be
there
Into the ground or up in the
sky
Or even where I lose myself
My affliction will find me
I trust my denial
Y'all see it as a curse
I make it a boon
I already see it
coming
The worst
outcome
I warn y'all
But y'all just
give me the tag
of "negativity".

~ Arohi Rathod
ENTC, 2020-24



Heart

~ Aarushi Singh
ENTC, 2020-24

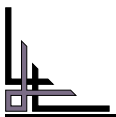
I want a heart that doesn't beat,
born with it outside of my chest
then no one else can gouge it out,
never again could I be obsessed.

It keeps still and my blood begins to rot,
Limbs going cold, colder.
This is what I've enticed,
What I've needed and abused.
Life hasn't left me even now,
Somehow deserved yet cruel.

It's me in a lighter sense,
Throwing me from the highest peaks.
Drowning as I swallow my own soul,
Let it break into lungs and bone.

And along with that heavy heart,
Which I have never myself owned,
Though burdened to carry.
I cannot throw it away,
And let what I have left of my humanity crumble,
I cannot let myself soften,
I cannot be one of the many.

To ashes and bits,
Void to a vastness of silence and mockery.
A punishment to all that hurt me,
This seems to fit-
This heart was not mine,
And still, I chose to break it.



A Small Bliss

»—love—»

~ Sharmistha Tongia
E&TC 2019-23

Keep waiting for a message that never comes,
Just a smile or just a word is enough.
Days pass by just like a fast breeze,
Was it really love?
Maybe it was just an illusion,
Something to comfort myself with ease.

Have you wondered how it felt?
When the closest one makes your heart melt,
Lights me up as it travels through my frame.
Haven't met him yet,
But sure I feel him everyday
Just something my heart desires
Hides in the corners of my gaze,
I keep it a secret, from my brain,
Just how much my heart misses him.
And although it knows the end shall not be met,
It never fails to say yes.



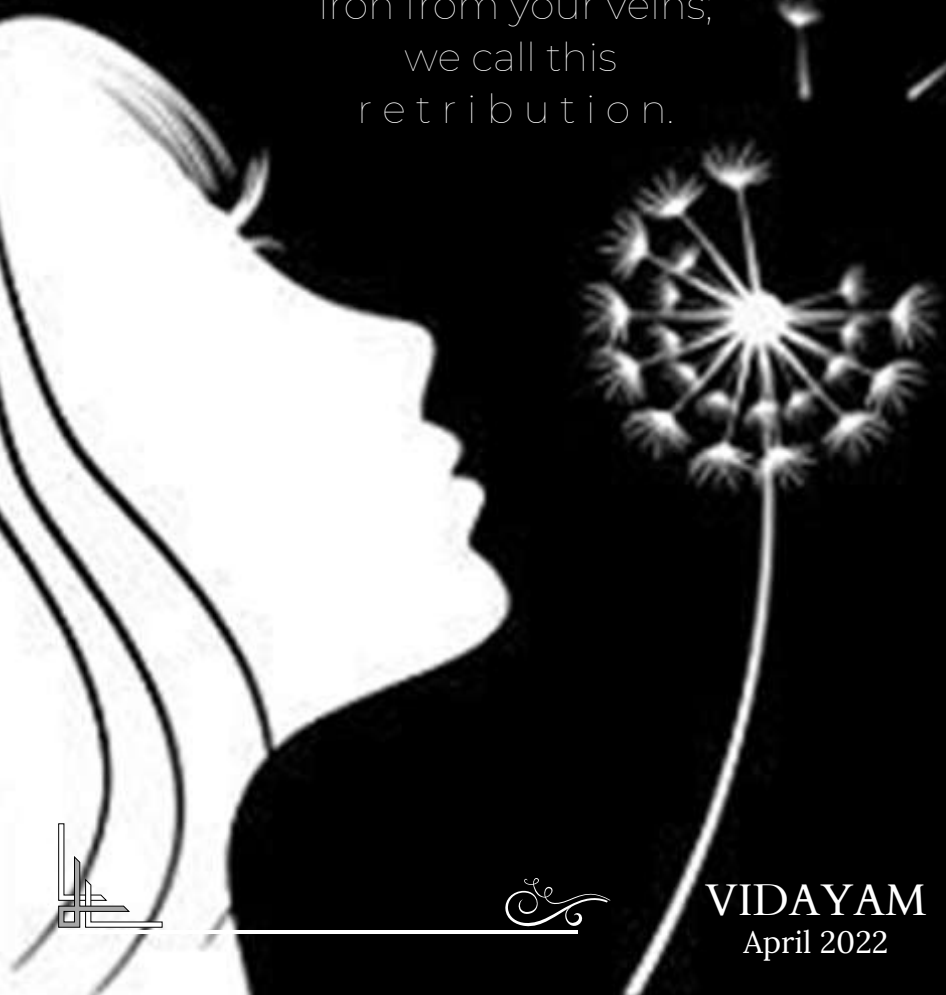
oh, silly you
with the ache in your chest
and the tears in your eyes,
your audacity angered the fates.
from atop the world,
hand in hand with a creature
that matched your broken parts
and
mended your splintered heart,
you shouted your belonging
and it came out like a challenge.

dear pathetic thing,
you torture yourself with
the images of their bodies together
as the heartbeats became a
heartbeat
with how close they came until
they blended at the edges and it
still
doesn't hurt enough, does it?

let the silver in your hands spill the
iron from your veins;
we call this
r e t r i b u t i o n .

You

~ Aarushi Singh
E&TC 2020-24



a jealous, vile creature,
the stains on your soul
are not punishment
enough
instead, look at those
hands
finding their place in the
heart and head of another,
deft manipulations that
have
always been your place,
and realise that this is
what you deserve for ever
daring to believe
you were special.



HIGH TECH

Technical Blog



CES 2022

Organized by Consumer
Technology Association

~ Krishnaraja Sagar T S
E&TC 2019-23

Highlights of CES 2022

CES, organized by Consumer Technology Association, is an annual showcase of new products and technology for the upcoming year. It is held in January every year. The event began on January 5, 2022, and went on for 2 days. A lot of cool gadgets, technologies and ideas were presented at the show ranging from great to breathtaking. My top ten picks for this year's highlights from the CES are as follows in no particular order.

- BMW iX Flow – German car manufacturer, BMW amazed everyone with their take on car paint. The company used E-ink technology as paint for their automobile, the same we see on Amazon's line-up of Kindle E-book readers. Now the car can change colours between white and black, even grey. There could even be patterns and designs on it. This would especially help to control the interior temperature of the car due to different levels of absorption of sunlight by black and white colours.



- Nvidia GPUs

- RTX 3080 Ti and RTX 3070 Ti – These are GPUs made by Nvidia and targeted towards notebook laptops. The company claims desktop-class performance with these graphic processors. The RTX 3080 Ti boasts a massive 16GB GDDR6 memory and 4GB of video memory more than its desktop counterpart. These can deliver 120 fps at 1440p. The lower variant RTX 3070 Ti delivers 100 fps at 1440p and claims to be 1.7x faster than the 2070 Super.

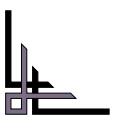
- RTX 3050 – This GPU is made for desktops and has 2nd Gen Ray Tracing cores and 3rd Gen Tensor cores capable of DLSS and AI. Other specifications of this processor include 2560 CUDA cores, 8GB GDDR6 memory and a 128-bit wide memory bus. It has a base clock speed of 1.55 GHz and boost clock speed of 1.78 GHz.

- Asus Zenbook 17 Fold OLED – This product can be identified as a tablet-laptop combo. Year by year, the margin between these two platforms have become thinner and thinner. This is a product for enthusiasts who love to have a laptop on the go but with extra portability. This device has a screen size of 17.3 inches when unfolded. The screen used OLED technology and has vivid colours and great contrast. When folded, it resembles a pocket diary and is conveniently portable. For typing, half of the screen doubles as a touch keyboard, and for those who prefer the key travel while typing, a detachable keyboard can sit on top of half the screen.

- Sony PlayStation VR2 – This gaming gadget is built for PlayStation 5. It used the processing power of the PS5 for providing a more high-resolution experience for the user. It includes features like 4K OLED HDR and eye tracking, which guarantees an awesome user experience. Additionally, the new Sense VR controllers offer more tracking fidelity.



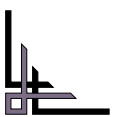
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- Autel EVO Nano and EVO Lite
 - EVO Nano – Weighing only 249 grams, this drone doesn't require a licence to fly in Canada. It has a 1/1.28-inch 50 MP CMOS sensor, which can capture up to 4K resolution. It can fly at speeds around 15 m/s and can fly for about 28 minutes on a single charge.
 - EVO Lite – This is the higher variant of the Nano. It contains a 1-inch CMOS sensor, capable of capturing video in 6K at 30 fps. It has a flight range of up to 7.4 miles and lasts 40 minutes on a single charge.
 - Samsung NFT TVs – The tech giant is planning support for NFTs in their 2022 TV line-up. Samsung wants their TV platform to let creators “share their art with the world”. Samsung claims that these TVs would allow previewing NFTs before purchase and display history of NFTs and blockchain metadata.
 - LG OLED EX – This TV from LG uses a fresh technology to enhance the users' viewing experience – Deuterium (heavy water). LG claims there are improvements to brightness and OLED technology. This would also reduce energy consumption significantly without taking a hit in picture quality.
 - Lenovo ThinkBook Plus Gen 3 – This product is aimed at creators and architects, who would love an additional screen on their laptop. Enter Lenovo ThinkBook Plus Gen 3. This laptop has a 17.3-inch screen with 3K resolution as the main display and an 8-inch touchscreen to the right of the keyboard. The additional room can be used for quick launching apps or multitasking. Functions of different software can be mapped to the extra screen for a much interactive experience.
 - Razer Project Sophia – There was a time when people thought that gadgets with modular components were the future.



Although this didn't come out to be true, there has been a significant process in this area over the years. Razer's Project Sophia is a concept involving a desk with modular components like displays, USB hubs, wireless chargers etc. Everything on the desk can be customized as per the user to suit the functionality he/she needs. This year's model has a bigger CPU and motherboard combo than last year.

- General Motors' Silverado, Equinox and Blazer EVs – General Motors confirmed that they would introduce the 2024 Equinox EV and Blazer EV in 2023. Equinox flaunts a sleek and sporty look and is reported to start at 30,000 USD. Chevrolet Blazer and Equinox EVs will be based on GM's Ultium EV architecture, which uses a scalable, skateboard-style platform for the floor-mounted batteries. Silverado is claimed to have a range of more than 300 miles per charge, whereas Equinox and Blazer have between 250 and 300 miles per charge.

With all these exciting technologies, we all hope 2022 will be a blast and a breakthrough year.



XENOBOTS

~ Harshita Dubey
MTech 2021

~ Aditya Jain
Faculty of E&TC

"Xenobots" are miniature robots that are synthetic life-forms that are designed using computer system applications. These computer-designed organisms can reproduce in a way different from any animal or plant known to science. "Xenobots" are one of the most trending subjects being talked about these days. It is an achievement not only in the field of Engineering but also Biology. They happen to be the world's first living robot that can self-replicate. It can be called as Robotic features imbibed in a living organism. These synthetic life forms were first created in year 2020 by using stem cells from frog embryos. These are capable of moving, working together in group and self-healing. This study paper talks about it as to what it really is, how it was created and what are its future aspects. This includes a gist of the result that the scientists have come up with in order to create Xenobots.



SIT DIARIES

Tales of SITian



VIDAYAM
April 2022



Life At SIT

~ Priyanshi Shiwaran
E&TC 2019-23

The magic of new beginnings!

It seems like it was only yesterday that I started this beguiling journey called "College Life," but we are halfway to graduation now. So here is a tale of "Life at SIT" penned by a Junior who can see that this journey of hers is soon coming to an end.

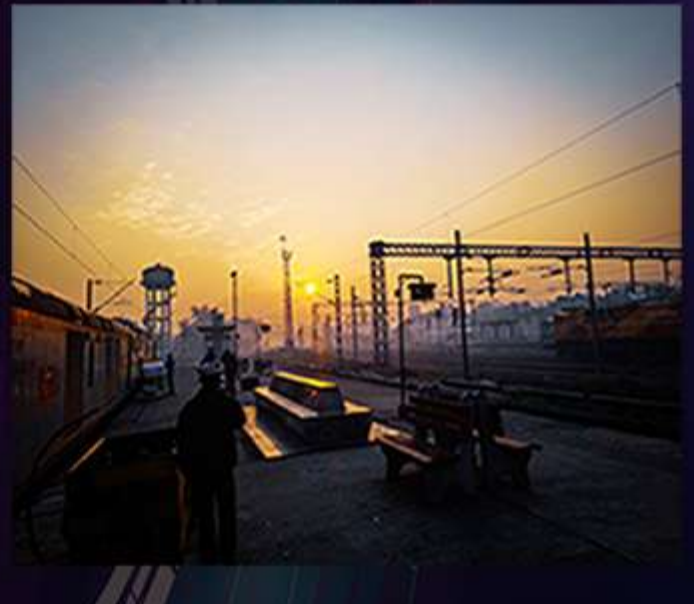
It was the 8th of July, 2019 that I first stepped foot in Symbiosis Institute of Technology officially as a student, and Man Oh Man what a rollercoaster this ride has been. I was also a part of the crowd who entered this place with dreams in their eyes, excited to meet new people and cherish these 4 aka best years of an individual's life.

Freshmen year, I will say was the best time I had here to date. From meeting new people and making friends during Orientation, finding the best people in your roommates, dancing in a flash mob in front of hundreds of people, laughing our hearts out during reverb, working till 5 am, and then dancing in the middle of chaos during Vidhyut, studying till the wee hours, just a day before the end semester, and that elated happiness after passing a test taught me way more life lessons than any novel or YouTube video could. But soon after, just like that lockdown struck, classrooms were replaced by MS teams, late-night gossip sessions turned to zoom meetings, and gradually friends became family.

So this is me thanking SIT, for these ecstatic 2.5 years, and many more memories and lessons to come as we move forward!



PHOTOGRAPHERS AMONG US



~ Pratham Pandey



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April 2022



CAPTURES BY

~ Krishi Shah



~ Drishti Singh



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CAPTURES BY

~ Avinash Shukla
ENTC 2020-24



~ Yash Goyal



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CAPTURES BY

~ Uttkarsh Sahu





LAURELS OF ENTIC

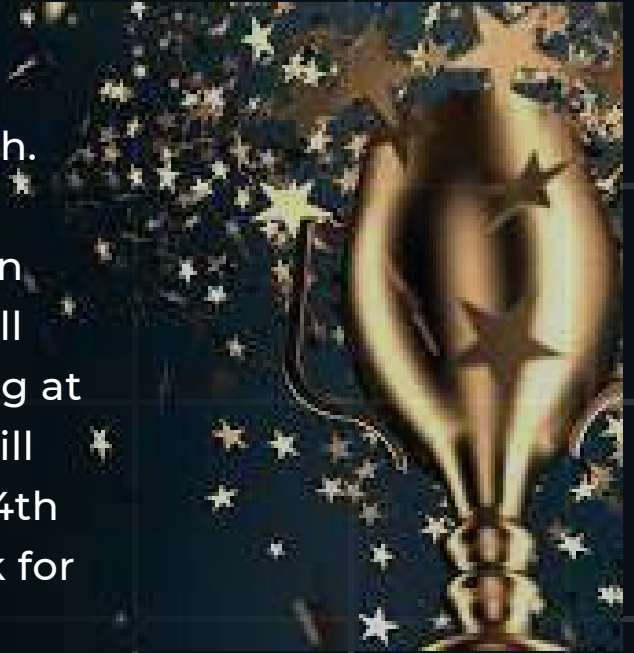
Achievements



International Internship offer ✨

The Mitacs Globalink Research Internship calls on talented individuals from all over the world to get a chance to work with the best scientists in Canada in their State of the Art research facilities and assist in conducting their research.

We are proud to say that Abhimanyu Patwa of 2019-23 batch has secured an Internship within Mitacs, where he will be working with Professor Chris Zhang at the University of Saskatchewan. He will be starting his internship soon in his 4th year and we wish him the best of luck for all his future career endeavours.



Inter Institute Chamionship Tennis Winner ✨

In December, Symbiosis International University held its Annual Inter Institute Championship, where each institute under the SIU umbrella, gets to show its physical and mental prowess in a series of sports competitions such as cricket, football, table tennis, swimming and many more. Viren Navekar of the 2019-23 batch represented our college, SIT in Men's Table Tennis. He has won first place beating over 12 institutes and bagging first place and shining the name of Symbiosis Institute of Technology.



Robu Createo Inaugural Winners 2021

In October 2021, five students (Abhirup Sarkar, Ayushman Khetan, Hussain Sabunwala, Eshan Gupta, Abhimanyu Patwa) of the batch of 2019-23 E&TC participated in an all-India competition organized by robu.in. The competition was called Robu Createo 1.0, the main objective of the competition was to create a turret that could launch any object at a specified distance. The competition had three categories namely-

- First prize- Most precise shot
- Second prize- Most innovative build
- Third prize- Simplest build

The mentioned group of five students successfully won the third prize for the simplest build turret. Also, winning the cash prize of Rs. 4000. To go into the details, the team's custom-made turret was built with the help of high torque motors, two wheels, Arduino microcontroller, tilt switch, cardboard, and to power the whole system, a power supply. The wheels were mounted on the rotor of the motors, rotating in opposite directions, the wheels produced a thrusting effect. As the motors used were of high torque, high consumption of current was required which was provided by the power supply. The tilt switch was provided to have a safety system, such that if the whole configuration completely tilted to one side by any accident, then power to the motors would be cut off. This logical operation was carried out using Arduino and HV relays. The range of the projectile could be controlled by adjusting the RPM of motors, in other words, adjusting the voltage and current to the motors.





TRICK TREAT

Horror Section



GHOST

~ Aarushi Singh
E&TC 2020-24

How do you kill a ghost?
A ghost is a reminder
of things long gone,
A premonition of the same to come,
telling you that it will always be like this,
always.

you will be like this, always.

A ghost is a tragedy
trapped in time.
A memory that has been
ruined, buried.

How do you kill something that's already
dead?

A ghost is not dead at all.
A ghost is born from a singular moment
of pain.
A ghost is a thing that wants to be dead
but cannot die.

How do you kill a ghost?
Not the same way you made it.



URBAN LEGENDS

~ Shreya Chaudhary
E&TC 2019-23

India is a country where between different diversity, various cultures, and faiths exist some fair share of stories that may not have a logical explanation but continue to arouse our curiosity to this day.

These are akin to the presence of the Loch Ness Monster in Scotland and the Yeti in the Tibetan Himalayas, both of which have eluded explanation. Few claim to have seen them, while others fabricate various explanations to explain their existence. Here are a few legends that have some Indians believing that the supernatural operates in the most enigmatic of ways.

- Malcha Mahal, New Delhi

Malcha Mahal is a 14th-century hunting lodge erected by Feroz Shah Tughlaq, the Sultan of Delhi. The lords of Oudh, Uttar Pradesh, took over the mahal in New Delhi later in the nineteenth century. Legend has it that the descendants of Nawab Wajid Ali Shah isolated themselves and continued to live here. People have often been gunned down and have bounds set on them. The guards of the nearby Earth Centre claimed to see journalists sneaking in Malcha Mahal and never returning.

- Bhangarh, Rajasthan

All the Delhi people may or may have not known about this. Ghost enthusiasts are intrigued to visit this fort situated on the outskirts of Delhi. It was built by Raja Bhagwant Singh in 1573 AD and is



among the most haunted places in India. Moreover, the Archeological Survey of India has forbidden access to the fort after sunset and asked the locals to move outside the limits of the Bhangarh fort. There are two legends of this place. The first one mentions the city of Bhangarh to have been cursed by a religious man called Baba Balak Nath.

- Aarey Colony, Mumbai

Car chasing in a white saree with messed up hair? Does this ring a bell? This has been the central plot of several films. And you're undoubtedly aware of this! Aarey Colony, located in Goregaon's suburbs, is famed for its ghost stories. During the day, this colony serves as a picnic site, but at night, it transforms into a haunted attraction. Many films shot in this spot, which has previously terrified team members. Also, witnesses claim to have spotted a woman loitering late at night. Aarey Colony guards reportedly claim to have heard and seen a lady ghost chasing and stopping motorists driving past.

- Lakkidi Gateway, Kerala

TAKE NO CREDIT FOR THE WORK OF OTHERS! Yes, India's urban folklore is founded solely on credit theft. So, this tale comes from Kerala's Wayanad area, namely Thamarassery Ghat Pass. It is said to be cursed by Karinthandan, a local tribesman. Legend has it that a British officer once sought assistance from this tribesman, and this is how the story began. He intended to find the quickest way to cross the Thamarassery pass and obtain access to Wayanad's wealth trove. As a result, the tribesman assisted him because he was a decent person. In exchange, what did the Britisher gift him? He viciously murdered him and claimed credit for discovering this path. Travellers travelling through the Lakkidi Gateway began to notice the roaming ghost of Karinthandan after a while. In addition, a priest was summoned to bind his spirit to a tree.



MEET OUR TEAM

HEAD

HOD

Dr. Pritesh
Shah



Saijal
Singhal

**Faculty
Head**

Dr. Aditya
Jain



EDITING TEAM



Hussain
Sabunwala



Sharmishtha
Tongia



Shreya
Chaudhary



Krishnaraja
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Priyanshi
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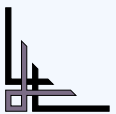
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