

Vol.5

Issue 01- Jan to Mar, 2022



Dr.M.G.R.
Educational and Research Institute
(DEEMED TO BE UNIVERSITY)
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University with Graded Autonomy Status
Maduravoyal , Chennai - 600 095



FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

MESSAGE

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DEPUTY HOD

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HOD-DESK

MESSAGE



by,
Dr.K.RAJAN,
HOD/Mech Engg.

Greetings!!

I am glad that Dr.MGR University has provided us an opportunity and vision to support the release of Newsletter series through all the quarters of each academic year. It's a forum to connect with all stakeholders. I am very happy that the department is releasing the News letter for the period Jan 2022-to Mar 2022. Wishing for many more series and happy reading.

MESSAGE



by,
Dr.A.MANOJ BABU,
Deputy HOD/Mech Engg.

The Newsletter is a mirror that reflects the activities of the department. Students from all walks of life find their voices heard in this space that welcomes and encourages diversity of thoughts and perspectives with open arm. Pleased to see that our department is releasing its first quarter Newsletter for 2022. I wish the purpose is realized and achieved.

MESSAGE

It gives us immense pleasure to be an integral part of this news letter, a communication method suited to the needs of the time which would carry messages to all concerned about important events, happenings and achievements. This certainly should play an effective role in creating a sense of belongingness amongst faculty team, alumni and students. Life can't have rewinds rather only flashbacks. Talented alumni will likely have a wealth of experience and skills to share with current students via talks and newsletters. We consider that our endeavors will be successful only when ,after reading these articles you get motivated to contribute more in future issues.

EDITORIAL BOARD

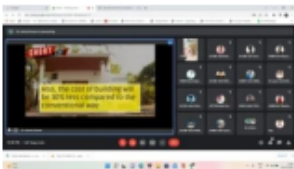
Mr.W.Andrew Nallayan – Asst Prof
Mr.D.A.Vinoth – Asst Prof

Ravi Rajan N – III Robotics and Automation Engineering
Jaison – III Mechanical Engineering
Anid P Lejo, – III Mechanical Engineering
Madhu Sudarsanan – II Robotics and Automation Engineering



ACTION CORNER

SNIPPETS FROM PALS

JANUARY TO MARCH			
DATE	EVENT TITLE	SPEAKERS	EVENT COORDINATE
25-Feb-2022	Professional Society on Talk on Role of Engineers in Developing India	Mr. M. GANESH, BIS External Auditor and Trainer for Industries & Institutes, Private Consultant	
01-Mar-2022	Interdisciplinary Talk on Biomedical Instrumentation	Dr. KRISHNAVENI Associate Professor Department of Mechanical Engineering Dr.M.G.R Educational and Research Institute	
15-Mar-2022	Alumni Lecture on Career Guidance and opportunities in industry	Mr. YASH PRAKASH, Sr. Key Account manager, Idemitsu Lube India Pvt.Ltd,	
18-Mar-2022	ISR Activity	Dr. GANESAN, Joint Registrar, Dr. M.G.R Educational & Research Institute	

ARTICLES CORNER

10 BENEFITS OF STUDYING ABROAD

by,

Mr. Andrew Nallayan,

Asst. Professor/ Mech Engineering.



Studying abroad for one of your degree might be one of the most beneficial experiences for a college student. By studying abroad, students have the opportunity to study in a foreign nation and take in the allure and culture of a new land. Here is a list of the top 10 reasons to study abroad!

1. See the World

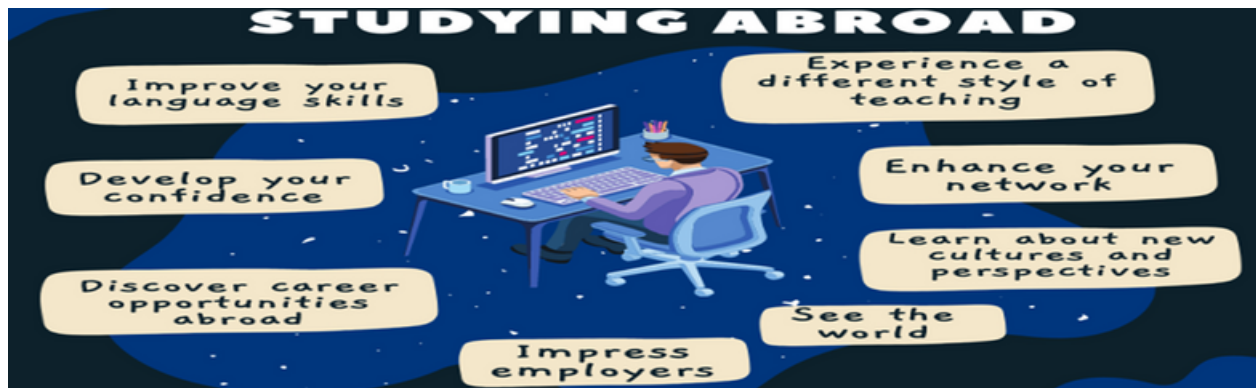
The biggest reason you should consider a study abroad program is the opportunity to see the world . By studying abroad, you will experience a brand-new country with incredible new outlooks, customs and activities. The benefits of studying abroad include the opportunity to see new terrains, natural wonders, museums and landmarks of your host nation.

In addition, when you're abroad, you won't be limited to traveling in just the nation in which you are studying – you can see neighboring countries as well! For example, if you study in France, you'll have the option to travel through various parts of Europe including London , Barcelona , and Rome.

2. Education

Another reason you might consider studying abroad is for the chance to experience different styles of education. By enrolling in a study abroad program, you'll have the chance to see a side of your major that you may not have been exposed to at home.

You'll find that completely immersing yourself in the education system of your host country is a great way to really experience and understand the people, its traditions, and its culture. Education is the centerpiece of any study abroad trip –it is, after all, a study abroad program—and choosing the right school is a very important factor.



3. Take in a New Culture

Many students who choose to study abroad are leaving their home for the first time. When they arrive in their new host country, they are fascinated by the distinct cultural perspectives. When you study abroad you will find incredible new foods, customs, traditions, and social atmospheres.

You will find that you have a better understanding and appreciation for the nation's people and history. You will have the opportunity to witness a completely new way of life.

4. Hone Your Language Skills

Chances are if you're planning on studying abroad, one of the major draws is the opportunity to study a foreign language. Studying abroad grants you the opportunity to completely immerse yourself in a new language, and there is no better way to learn than to dive right in.

In addition to the considerable language practice you will get just in day to day life, your host university will likely offer language courses to provide you with a more formal education. Immerse yourself in a new culture and go beyond a purely academic experience

5. Career Opportunities

When you finish your study abroad program and return home, you will return with a new perspective on culture, language skills, a great education, and a willingness to learn. Needless to say, all of these are very attractive to future employers.

Many students find that they love their host country so much that they decide to seek work there. If you can relate, you will find that a local education will be very valuable when searching for a potential job in that country.

6. Find New Interests

If you are still questioning why to study abroad, you should know that studying in a different country offers many new activities and interests that you may never have discovered if you'd stayed at home.

You might find that you have an as-yet undiscovered talent for hiking, water sports, snow skiing, golf, or various other new sports you may never have tried back home.

You'll also have the chance to discover other new and exciting forms of entertainment. Plays, movies, dancing, nightclubs, and concerts are just a few activities that you can enjoy.

7. Make Lifelong Friends

One of the biggest benefits of studying abroad is the opportunity to meet new lifelong friends from different backgrounds. While studying abroad, you will attend school and live with students from your host country. This gives you the opportunity to really get to know and create lasting relationships with your fellow students.

After the study abroad program ends, make an effort stay in contact with your international friends. In addition to rewarding personal relationships, these friends can also be important networking tools later down the road.

8. Personal Development

There is nothing quite like being on your own in a foreign country. You might find that studying abroad really brings out your independent nature. Students who study abroad become explorers of their new nation and really discover the curiosity and excitement that they harbor.

A benefit to studying abroad is the opportunity to discover yourself while gaining an understanding of a different culture. Being in a new place by yourself can be overwhelming at times, and it tests your ability to adapt to diverse situations while being able to problem solve.

9. Graduate School Admissions

Like future employers, graduate school admissions boards look very highly on study abroad experiences. Students that study abroad display diversity and show that they aren't afraid to seek out new challenges or put themselves in difficult situations.

Most importantly, students who have studied abroad show just how committed they are to their education. Graduate schools regularly look for candidates who will bring a unique aspect to their university. Students who have studied abroad have shown that they have the curiosity and educational acumen to be a leader in graduate school.

10. Life Experience

Why study abroad? For most students, this time may be the only opportunity they ever get to travel abroad for a long period of time. Eventually you will find a job and career, and the opportunity to study abroad may turn out to be a once in a life time opportunity.

Take this opportunity to travel the world with no commitments but to study and learn about new cultures. Studying abroad is an experience unlike any other.

These are just some of the advantages of studying abroad. The benefits of this experience really can't be explained in such a short article. Boost your language skills as you live in another country, get out of your comfort zone and meet people from different places of the world and at the same time get the best education.

Living in another country exposes you to things you cannot experience in your home country and in the future it will help you stand out from the competition as you apply for jobs and your experience of studying abroad is something you can share on your resume.



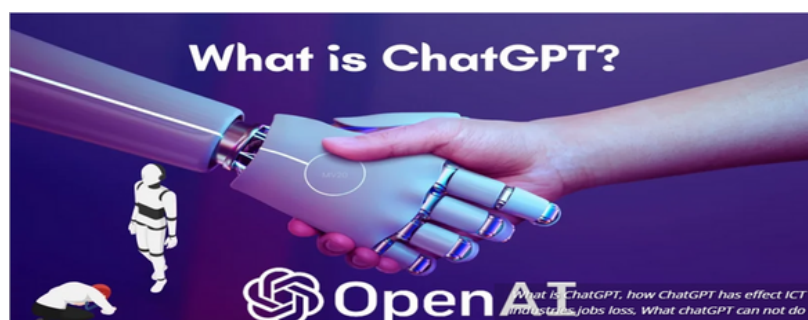
CHATGPT

by,

Mr. Shri Krishnan,
Asst. Professor/ Mech Engineering.



CHATGPT



The current IT industry is characterized by rapidly evolving technology, increasing demand for automation and data analysis, and a shortage of skilled workers in certain areas. In this context, chatbots like ChatGPT have emerged as valuable tools for organizations. ChatGPT is a language model developed by OpenAI that uses deep learning algorithms to generate human-like responses to natural language questions.

ChatGPT is a chatbot launched by OpenAI in November 2022. It is built on top of OpenAI's GPT-3 family of large language models, and is fine-tuned with both supervised and reinforcement learning techniques.

ChatGPT is an amazing tool, and Microsoft's 10-billion-dollar investment will change how we improve our daily lives!

But here's a reality check. ChatGPT can replace many programmers, systems administrators, and many "hands-on only" tech professionals. But, you can fight back and stay relevant! Despite ChatGPT's immense potential, it is NOT human – that's your key to success! ChatGPT cannot build relationships. ChatGPT cannot lead and bring out the best in others. ChatGPT cannot deliver a presentation and capture an audience. ChatGPT cannot sell.

So be human! In fact, I suggest you celebrate and leverage your humanity!

Advantages of ChatGPT in the IT industry:

- 1.Improved Efficiency: ChatGPT can handle repetitive tasks, such as answering frequently asked questions, generating reports, and handling simple customer service inquiries, freeing up time for human workers to focus on more complex tasks.
- 2.Increased Accuracy: ChatGPT can provide accurate answers and perform certain tasks with high accuracy, reducing the likelihood of human error.
3. Cost-effective: ChatGPT can reduce labor costs by automating certain tasks, making it a cost- effective solution for organizations.

Limitations of ChatGPT in the IT industry:

- 1.Lack of Complex Problem-solving Skills: ChatGPT lacks the complex problem-solving skills, creativity, and critical thinking ability that human workers bring to the table, making it unsuitable for certain tasks.
- 2.Requires Human Supervision: ChatGPT is just a tool and requires human supervision, maintenance, and direction to function effectively.
- 3.Limited Domain Knowledge: ChatGPT's knowledge is limited to the data it was trained on, and it may not be able to answer questions outside of its training data.

In conclusion, while ChatGPT can provide valuable assistance in certain areas of the IT industry, it will not completely replace human workers. The unique skills and expertise of human workers continue to be an indispensable component of the IT industry, and their roles will evolve as technology advances. Instead of replacing human workers, ChatGPT should be seen as a complementary tool that can improve efficiency and productivity in certain areas.





EVOLUTION OF MODERN AIRCRAFTS

by,

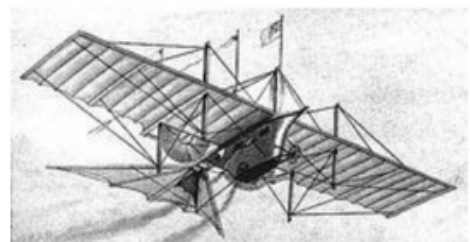
Anid P Lejo,
3rd Yr, Mechanical Engg.



HISTORY

In 1799, Sir George Cayley defined the forces of lift and drag and presented the first scientific design for a fixed-wing aircraft. Building on his pioneering work in aeronautics, scientists and engineers began designing and testing airplanes. A young boy made the first manned flight in a glider designed by Cayley in 1849. In 1874, Felix duTemple made the first attempt at powered flight by hopping off the end of a ramp in a steam-driven monoplane. Other scientists, such as Francis Wenham and Horatio Phillips studied cambered wing designs mounted in wind tunnels and on whirling arms. Finally in 1894, Sir Hiram Maxim made a successful takeoff (but a woefully uncontrolled flight) in a biplane "test rig." At the same time, Otto Lilienthal made the first controlled flights, shifting his body weight to steer a small glider. Inspired by his success, Wilbur and Orville Wright experiment with aerodynamic surfaces to control an airplane in flight. Their work leads them to make the first controlled, sustained, powered flights on December 17, 1903 in Kitty Hawk, North Carolina.

- The First Airplanes, 1799 to 1853
- Powering Up, 1854 to 1879
- Airmen and Chauffers, 1880 to 1898
- The Road to Kitty Hawk, 1899 to 1903



The first practical jet aircraft was the German Heinkel He 178, which was tested in 1939. In 1943, the Messerschmitt Me 262, the first operational jet fighter aircraft, went into service in the German Luftwaffe. The first jet airliner, the de Havilland Comet, was introduced in 1952. The Boeing 707, the first widely successful commercial jet, was in commercial service for more than 50 years, from 1958 to 2010. The Boeing 747 was the world's biggest passenger aircraft from 1970 until it was surpassed by the Airbus A380 in 2005. Supersonic airliner flights, including those of the Concorde, have been limited to over-water flight at supersonic speed because of their sonic boom, which is prohibited over most populated land areas. The high cost of operation per passenger-mile and a deadly crash in 2000 induced the operators of the Concorde to remove it from service.



Modern Airplane Technology: 1950-1999

Overview

From the moment Orville and Wilbur Wright (1871-1948 and 1867-1912, respectively) took their famous flight at Kitty Hawk, North Carolina, the world fell in love with the idea of the airplane. But man's fascination with flight goes back even further. As early as ancient Greece, people gazed in wonder at birds' flight, wishing they too could reach those soaring heights. Of course, for the mythological figure Icarus that wish turned fatal when he flew too high and too close to the sun; the wings his father had created out of feathers and wax melted, sending him crashing to his death.

Background

Many times throughout history, man has tried to copy birds' flight and failed. Leonardo da Vinci (1452-1519) sketched flying machines in the 1500s and even made some models. The first successful flights, however, were not taken until the early 1780s, and they were not in flying machines but in hot-air balloons. In the late 1850s balloons were enhanced with steam engines to create airships.

In the 1800s the aeronautical pioneer Sir George Cayley (1773-1857) solved many of the technological questions that airplane flight posed. In 1853 his glider was the first aircraft to take a man into the air. But credit for the first sustained flight belongs solely to the Wright Brothers, who by 1905 could keep their plane airborne for a distance of more than 20 miles (32 km). The next three decades saw numerous improvements to the airplane and the distances that could be flown.

Jet -launched X -World War II over 4,000 miles per hour (6,437 kph) (1950 -1, developed by the National Advisory -1953) achieved much greater . Over the next decade jets were h. -and Aircraft instrumentation and automation also evolved significantly throughout the years following World War I.

While early pilots had to rely on a magnetic compass, barometric altimeter, and an anemometer to indicate airspeed, subsequent airplanes saw numerous technological advances. From World War II until the mid-1960s, radio altimeters, weather radar, alarms for fuel, temperature and landing-gear status, as well as airspeed and altitude indicators were added. The 1950s saw the first automatic pilots, which were able to maintain speed and direction. Between 1965 and 1980, improvements included mechanized flight directors, automatic landing systems, and digital computers for monitoring the status of hydraulic and electrical systems. Several digital displays were added in the 1980s as well as moving-map displays, collision-avoidance systems, and flight-management systems.

In the 1980s and 1990s global positioning navigation systems were able to guide airplanes. In the 1960s two more successful Boeing models were released. The 727, launched in February 1963, carried 189 passengers and went on to become the second bestseller of all time. In 1967 the most successful jet of all was introduced—the two-engine Boeing 737, which would make up close to a quarter of all U.S. commercial airplanes by the 1990s. The introduction of large, jet-powered passenger aircraft in the 1960s ushered in a new era for air travel. In early 1969 Boeing introduced its jumbo jet airliner, the first in its 747 series.

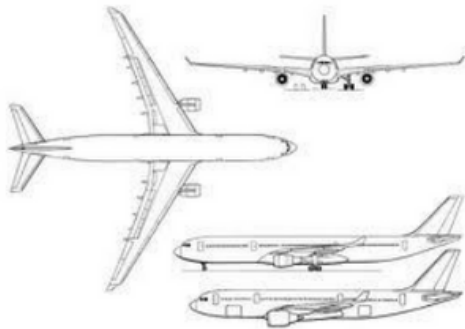
The most remarkable thing about the plane was its enormous size, making it tower over every other airplane that came before it. The 747 boasted a 185-foot-long (56 m), 20- foot-wide (6.1 m) passenger cabin, which could seat eight or ten people across with plenty of headroom and comfortable seating. The first 747s went into service on Pan American's New York-to-London route in January 1970 with 324 passengers. Over the next two decades the company added eight models to its fleet of 747s and made significant improvements to the design each year.

In 1970 the McDonnell Douglas DC-10 was introduced as a competitor to the 747. This powerful plane could carry up to 380 passengers and traveled at 587 miles per hour (945 kph). By 1974 more than 90 percent of flights were taken on jet aircraft.

Impact

Airplane production during World War II numbered in the tens of thousands across the United States, Great Britain, Germany, Russia, and Japan. But because such a large number of planes was required for the war effort, the emphasis was on building conventional propeller planes, rather than jet powered ones. Although the jet engine was faster and more powerful, its development was essentially put on hold during the 1940s. After the war, the jet needed numerous refinements before it was ready to be used commercially. The first jet passenger service was available in May 1952 with the launch of the British De-Havilland DH 106 Comet. The new aircraft was able to cut travel time in half from that of the previous piston-engine planes. The Comet offered a smooth, quiet flight with a pressurized cabin that allowed it to be flown in all types of weather conditions. The Comet, proved short lived, however when it fell victim to several accidents. In 1958 a revised version, the Comet 4, was introduced. It could accommodate up to 44 passengers with a four-person crew and had more commercial success than its predecessor.. The first truly successful passenger airplane was the Boeing 707-121, which took its inaugural flight in 1954. Its earliest incarnation was powered 5 by four jet engines, each producing 13,000 pounds of thrust. The wing span was 130 feet (40 m) across, and it could cruise at speeds of 585 miles per hour (941 kph). The 707 held 189 passengers and by 1958 was able to make nonstop flights across the Atlantic. The jet age was inaugurated on October 26, 1958, with a flight from New York to Paris on a Boeing 707-121. Six weeks later came the first commercial jet flight in the U.S., from New York to Miami. By the mid 1950s the number of passengers traveling annually was multiplying. Part of this rise in air travel was a result of the reduced cost of flying. In 1929 the cost per passenger mile was 12 cents as compared with 5.1 cents more than a decade later. The number of people traveling jumped from 2.5 million in 1937 to 45 million in 1952 and 90 million by 1957.

There were also adv planes used in the speeds able to fly at twice the speed of sound (Mach 2). Bomber and transport jet aircraft were also able to fly at supersonic speeds. The most impressive, however, was the air Com Dropped from the B speeds of up to Mach 6.04 at heights of more than 67 miles (108 km) above the eart mittee for Aeronautics (NACA) and debuted in the early 1960s. than those used in Korea War -52 bomber, this impressive machine could travel at ancements made to jet fighter aircraft in the 1950s.



In 1994 Boeing countered with its 777 model, which could carry between 292 and 500 passengers and used two Pratt and Whitney engines that could generate over 70,000 pounds of thrust. The 777 was the first plane to be built entirely by computer blueprint. It also achieved the lowest passenger per-mile cost and the greatest fuel efficiency of any passenger jet.

In the late twentieth century the emphasis in jet building was not only to improve passenger safety but to accommodate a growing number of travelers and to meet the insatiable need for greater speed and reduced travel time. New frontiers in aeronautic technology promise to take man to greater speeds and heights than ever before experienced



INSPIRING PAPER CRAFT - A HOBBY

by,
Madhu Sudarshan,
2nd Yr, Robotics & Automation Engg.



Humble old newspaper always fascinates me to manipulate in hands! When just sitting idle, watching TV or in deep thoughts or feeling blue, my hands often reach for the daily to fold or roll to different shapes and article. The readily available newspaper is my favourite kinda paper material that is easy to fold to the smallest, roll to the thinnest to make miniature structures. Origami the art of folding single paper to figures is an interesting craft work; we can explore fold patterns with innumerable figures that come to our mind. We just need imagination and see things in front of us as paper folds! Starting with a paper boat as any other child, I started making small gifts like butterflies, dino baskets, pop up cards etc made of paper rolls and paper folds and happy to see the surprised and excited faces receiving them (most often my mom!)

Recently I have moved more to figures and structures made of paper rolls like the one displayed here (Dining table).

Lamp shades, Flower vases, outdoor Swing are some of them I have tried.

Another paper craft I am currently working on is an 840 pieces structure, each piece being a paper fold that will be arranged like a lego Paper craft is an interesting hand work which requires only interest and imagination and little bit patience without any or little cost.

I will be happy to share my work and methods of doing them in subsequent issues

SUCCESS STORY OF BILL GATES

by,
Ravi Rajan N,
3rd Yr, Robotics & Automation
Engg



Introduction:

Bill Gates's journey of success was not another rags-to-riches story. Born in 1955, William Henry Gates III was born and raised in Seattle, Washington within a fairly wealthy family. His father, a lawyer, and his mother, board of directors for First Interstate BancSystem and the United Way of America, encouraged competition within him. Being a bullied child, Gates was inspired to seek for better.

Gates developed a passion for computers and programming at an early age. He was a brilliant student who performed exceptionally well in academics, especially in the subject, Mathematics. In 1975, he co-founded Microsoft along with his partner Paul Allen and became the world's renowned self-made billionaire.

The era of Microsoft

1968: Building the first program

13-year-old Gates was enrolled in the Lakeside Prep School where he wrote his first program. While in 8th grade, he developed an interest in programming the General Electric system in BASIC and was excused from classes to pursue it. And hence, Gates built his first program in the General Electric machine.

He met Paul Allen at the school where they worked together to find bugs in the PDP-10 system belonging to Computer Center Corporation. Gates, Paul and two other students wrote a payroll program for Information Sciences in exchange for computer time and royalties. It created a lot of buzz when the entire school became aware of Gates's programming skills.



1972-75: Venture, Harvard, and the MITS Altair



17 years old Gates started a venture called Traf-O-Data with Paul to make traffic counters based on Intel 8008 processors.

In 1973, he graduated as a National Merit Scholar and enrolled at Harvard College in the following autumn. Gates, however, did not have a study plan at Harvard and spent a lot of time using the computers.

In 1974, he joined Paul at Honeywell and in 1975, the MITS Altair 8800 based on Intel's 8080 CPU was released.

Bill and Paul saw this as an opportunity to start their own software company.

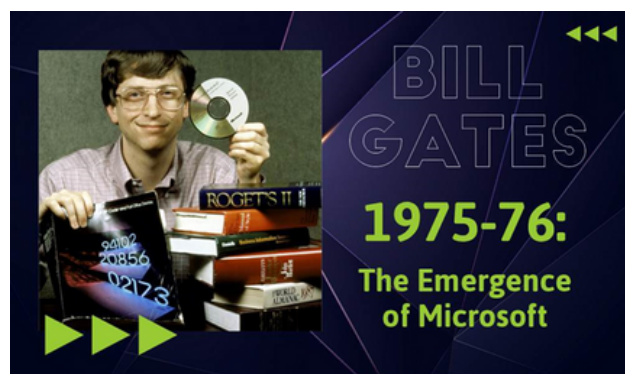
1975-76: The Emergence of Microsoft

In 1975, Gates tried to gauge MITS's interest. He came across an article demonstrating the Altair 8800 and contacted MITS to inform them about the BASIS interpreter for the platform.

Surprisingly, Gates and Allen did not have any code written. They met with the MITS president and developed an Altair emulator in a short time to demonstrate on a minicomputer and the BASIC interpreter.

The meeting was an instant success that helped Gates and Allen bag a deal with MITS to distribute the interpreter as Altair BASIC. Paul Allen was hired into MITS and Gates took a leave of absence from Harvard to work with Allen in November 1975. The partnership was named Micro-soft.

A year later, the hyphen was dropped and on 26 Nov 1976, the trade was registered as Microsoft Corporation.



1980-90: IBM X Microsoft



In 1980, IBM approached Microsoft to write a BASIC interpreter for the new IBM PC. It formed a partnership with IBM to bundle its operating system with the IBM computers. Under that deal, IBM paid Microsoft royalty for every sale. Despite IBM's name on the operating system on the operating system, the press quickly identified Microsoft as being very influential on the new computer. The computer was called by an expert in the industry as "Gates computer". The company was restructured in 1981, Gates became the president and board chairman.

1985: OS/2 vs Gates Computer

In 1985, Microsoft launched its first retail version of Microsoft Windows. The same year, IBM requested Microsoft to develop a new operating system for their computers called OS/2. Although Microsoft continued producing that operating system, it also continued to sell its own alternative that was in direct competition with the OS/2.





Post-1990: World's Personal Computers

When Microsoft launched several versions of Microsoft Windows in the 1990s, they had captured over 90% market share of the world's personal computers. In the future, Microsoft's partnership with IBM deteriorated due to creative differences. However, ever since, Microsoft has not looked back and went on to create a history within the software industry.

When Bill and Paul Allen started Microsoft, their vision of a computer on every desktop and in every home seemed farfetched to most people. Today, owing to Microsoft and several other companies, that vision has become a reality in various parts of the world—with personal technology becoming an integral part of society.

The Era of Charity and Philanthropy

1994-2010: The years of Philanthropy

Bill Gates's success is not confined to the success of Microsoft and the further ventures. Being a philanthropist has earned him immense recognition and success throughout the world.

In 1994, Gates started his foundation—William H. Gates Foundation—by selling some of his shares in Microsoft.

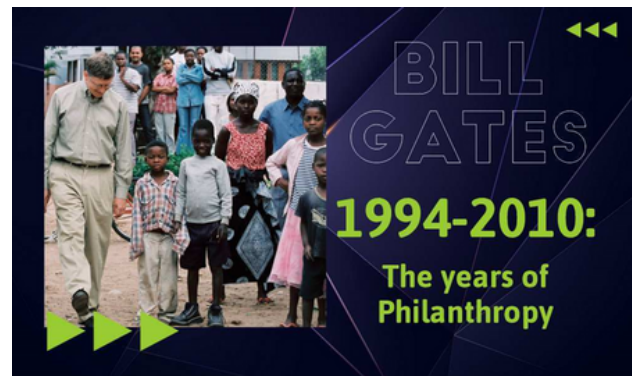
In 2000, Microsoft launched its Windows 95 and in the same year, Gates established the charitable Bill & Melinda Gates Foundation.

In 2001, he became the Chief Software Architect of Microsoft after Steve Ballmer assumed the role of CEO.

In 2008, when Microsoft launched the original Xbox, Gates quit his daily job at the company.

In 2010, Bill Gates, Melinda Gates and Warren Buffet altogether launched 'The Giving Pledge'. It was a commitment by the world's wealthiest people to dedicate most of their wealth to philanthropy.

2014: Stepping down from the post



In 2014, Gates officially stepped down as the Chairman. However, he continued remaining on the board and served as the technology advisor.

Since the time he has stepped down from the board, Gates has hardly had any involvement in the day-to-day operations of Microsoft

2015-Present: Philanthropic Investments

Most of Gates's time is spent on philanthropic activities and partaking in community projects. Bill Gates has co-founded several foundations. More than 80% of his wealth is pledged to the 'Giving Pledge' charity upon his death.

In 2015, he launched a \$5.5 billion effort to eradicate polio by 2018.

In 2017, he announced the formation of the Child Health and Mortality Prevention Surveillance Network (CHAMPS) to help prevent childhood deaths.

In 2018, Bill joined forces with a group of philanthropists to create the Diagnostics Accelerator, a program aimed at finding a way to diagnose Alzheimer's earlier.

In March 2020, Gates left his board positions at Microsoft and Berkshire Hathaway to focus on his philanthropic efforts including climate change, global health and development, and education.

Gates inclination towards sustainable technology and clean and green technology is reflected in his philanthropic interests. In December 2020, he called for the U.S. federal government to create institutes for clean energy research, analogous to the National Institutes of Health.

To date, Gates continues to be involved in various philanthropic and community projects. The world's self-made billionaire is a true example of how the road to becoming successful begins not only with a successful business venture but also with empathy and philanthropy.

ALUMNI CORNER

My college journey

BY,
RAHUL UPADHAYAY.,
MECH ENGG.
BATCH (2015- 19).

My college journey at Dr MGR University has been one of the most memorable and rewarding experiences of my life. It's no secret that college life is a journey. From the first day of class to the last, students are constantly learning and growing. But the college journey isn't just about the academics—it's about the experiences, relationships, and opportunities that come with it. I remember the first day of my college when I stepped into the university premises with a sense of excitement and joy. I had heard so much about the university and now I was finally here. The campus was vibrant and bustling with students from different backgrounds and cultures. I was amazed by the diversity of the student body and the vast array of courses offered by the university. My first year at the university was full of new experiences. I learned how to manage my time, how to work in a team, and how to develop my interpersonal skills. I also developed my academic skills, as I was exposed to various challenging courses. I remember the hard work I put into my studies, the long hours spent in the library, and the dedication I had for my courses.



One of the most memorable experiences I had during my college journey was my involvement in various extracurricular activities. I was part of the (SOME) - Society of Mechanical Engineering, a member of the Event management club, and I also participated in various college fests. These activities helped me to further develop my communication and leadership skills. The most memorable moment of my college journey came when I graduated. I was filled with a sense of accomplishment, pride, and satisfaction. My college journey had helped me to grow as a person and I was grateful for all the lessons I had learned. I would like to take this opportunity to thank our respected Teachers and Staff for their help, guidance, and support during my college journey. I am grateful for the knowledge and skills they have imparted to me, which have been invaluable in my academic and professional development. My college journey at Dr MGR University was one of the most rewarding experiences of my life. I developed both academically and personally, and I am grateful for all the opportunities I had at the university. I am proud to have been part of such a prestigious university and I will always cherish the memories I made during my time there.

After my college graduate, I am elated to share that I have secured a campus placement with an expanding Energy company. After four years of hard work and dedication, I am thrilled to have been chosen for the role and to begin my career. This opportunity came about during my final semester when the company visited my campus for recruitment. The past four years have been a rollercoaster of emotions and experiences. I am grateful to my college and all my professors, mentors, and peers who have supported and encouraged me throughout my journey. Without their help and guidance, I would not have been able to achieve this success.

-Rahul Upadhayay



PUBLICATIONS

STAFF PUBLICATIONS JAN-MAR 2022

1. INFLUENCE OF IPNS (VINYLESTER / EPOXY / POLYURETHANE) ON THE MECHANICAL PROPERTIES OF GLASS / CARBON HYBRID COMPOSITES,

IIUM ENGINEERING JOURNAL, Vol. 1, no. 339, pp.348-0.281

VIJAYAKUMAR K R., Mechanical Engineering, FACULTY OF ENGINEERING AND TECHNOLOGY
SANTHOSH PRIYA KARJALA., Mechanical Engineering, FACULTY OF ENGINEERING AND TECHNOLOGY

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INFLUENCE OF IPNS (VINYLESTER / EPOXY / POLYURETHANE) ON THE MECHANICAL PROPERTIES OF GLASS / CARBON HYBRID COMPOSITES

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2. Transformer Less Grid Integrated Single Phase PV Inverter Using Prognosticative Control, INTELLIGENT AUTOMATION AND SOFT COMPUTING, Vol. 2, no. 1121, pp.1138-0.778

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Intelligent Automation & Soft Computing
DOI:10.32604/iasc.2022.023079
Article

 Tech Science Press

Transformer Less Grid Integrated Single Phase PV Inverter Using Prognosticative Control

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Received: 27 August 2021; Accepted: 22 October 2021

3. Analyzing the Fatigue Behaviour of E-Glass Fiber Reinforced Interpenetrating Polymer Networks (EP/VP/EV) Leaf Spring,

MATERIALS SCIENCE FORUM, Vol. , no. 35, pp.45-0.426

VIJAYAKUMAR K R., Mechanical Engineering, FACULTY OF ENGINEERING AND TECHNOLOGY



4. Experimental Evaluation of Direct Injection Diesel Engine Performance and Emissions with Acacia Biodiesel,

INTERNATIONAL JOURNAL OF AMBIENT ENERGY, Vol. , no. 1, pp.18-1.086

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5.Preliminary Study On Additive Manufactured Plastic Liner Of an Acetabular Cup Component

JURNAL TEKNOLOGI (SCIENCE & ENGINEERING), Vol. 2, no. pp0.538

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UTM JURNAL TEKNOLOGI
ISSN 2180-3722

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