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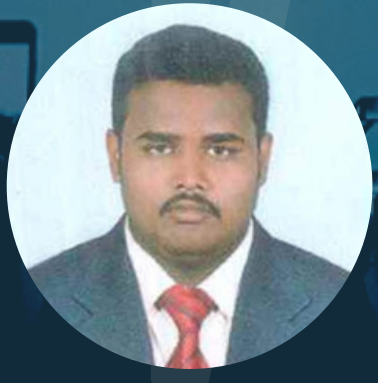

S. MAHAPRAHADEESWARAN

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ETHICAL AI

WHAT IS ETHICAL AI?

Ethical AI refers to the development and deployment of artificial intelligence systems that emphasize fairness, transparency, accountability, and respect for human values.

Ethical AI is artificial intelligence that adheres to well-defined ethical guidelines regarding fundamental values, including such things as individual rights, privacy, non-discrimination, and non-manipulation.

Ethical AI is not limited to what is permissible by law. Legal limits pertaining to the use of AI set a minimum threshold of acceptability, while ethical AI sets policies that go beyond legal requirements to ensure respect for fundamental human values. For example, AI algorithms that effectively manipulate people - teens in particular to engage in self-destructive behaviour may be legal, but they do not represent ethical AI.

WHY IS ETHICAL AI IMPORTANT?

AI has the potential to be used for both good and evil purposes. The benefits from the ethical uses of AI are numerous and significant. The application of AI can help organizations operate more efficiently, produce cleaner products, reduce harmful environmental impacts, increase public safety, and improve human health. But if used unethically – e.g., for purposes such as disinformation, deception, human abuse, or political suppression – AI can cause severe deleterious effects for individuals, the environment, and society.

Laws and regulations are generally insufficient to ensure the ethical use of AI. It is incumbent on individuals and organizations who use AI – as well as those who develop and provide AI tools and technology – to practice ethical AI. Users and purveyors of AI must take proactive steps to make sure they are using AI ethically. This obligation goes beyond issuing statements; there must be specific policies that are actively enforced.

"What an achievement to mark the 100th issue of the IT magazine produced by these students! Each edition has been a testament to their passion for technology and their ability to communicate complex ideas effectively. Wishing them even greater success in the future!"

Mr. P. Ramesh
Head Of the Department
Computer Science (UG)

HOW TO MAKE YOUR AI MORE ETHICAL?

Ethical AI requires a combination of expertise in computer science and AI policy and governance to ensure that best practices and codes of conduct are followed when developing and deploying systems. Taking steps early is the best way to manage unethical AI and get ahead of upcoming regulations. No matter the stage of system development, steps can always be taken to make AI more ethical. This will be vital for companies to protect their reputation, ensure compliance with evolving legislation, and deploy AI with greater confidence.

COMPONENTS OF ETHICAL AI

Ethical AI Framework Components

PRINCIPAL OF ETHICAL AI

- Building ethical AI reduces risk and is the right to do –but it's hard.
- The definition of ethical AI differs depending on who you ask and what initiatives you look at.
- We identity ten core principal that have broad consensus across the globe.

  They are principal of ethical AI:

  1. Interpretability
  2. Reliability and robustness
  3. Security
  4. Human agency
  5. Lawfulness

Elements of our ethical AI policies include:

We will work with robustly democratic governments.

We won't allow totalitarian states to use our AI to advance their regimes or control their citizens.

We won't allow our AI to be used to deceive people or assign values to them through social scoring and other AI-powered systems.

We will work in the energy industry to improve the efficient production and delivery of energy of all kinds, including renewables.

If we learn that our AI is being used in a ways that violates our ethics, we'll turn the switch off.

"This Magazine is really great! The article in the magazine is really gorgeous, really great job! Congrats the entire team for their effort"

Ms. M.S.Kokila
Assistant Professor
Computer Science (UG)

TECH INNOVATION IN EDUCATION

- **AI-Powered Personalized Learning:**

A student using a tablet to interact with a personalized learning platform; suggestions for content are tailored to them or adaptable learning pathways are displayed on the screen. Artificial intelligence (AI)-powered customized learning makes use of these technologies to customize learning experiences and materials to each student's particular needs, interests, and learning preferences.

This method makes use of algorithms and data analytics to examine how students engage with the course materials, spot trends, and modify the speed, level of difficulty, and kind of information offered. Artificial intelligence (AI) boosts engagement and encourages a deeper comprehension of subjects by offering personalized learning routes and recommendations. AI also makes it easier to provide feedback and assess students in real-time, giving teachers the ability to closely monitor their development and take appropriate action.

By targeting each student's strengths and weaknesses, encouraging self-paced learning, and advocating for a more efficient educational experience that takes into account a variety of learning profiles, this individualized approach seeks to maximize learning results.

- **VR and AR Immersion Learning:**

Students studying 3D anatomical models with AR software on tablets, or donning VR headsets to explore a virtual historical location. Immersion learning, which includes Virtual Reality (VR) and Augmented Reality (AR), describes instructional approaches that use immersive technologies to build virtual worlds in

With the use of headsets, virtual reality (VR) fully submerges people in virtual worlds, obstructing the outside world. Augmented Reality (AR) modifies users' perception of their surroundings by superimposing digital information onto the physical world. By using these technologies in education, realistic simulations that would be impractical or impossible to experience first-hand like virtual field trips, lab experiments, or historical reconstructions can be provided. Immersion learning using VR and AR improves student engagement, expands their comprehension, and promotes experience learning by allowing them to interact with and manipulate virtual objects or settings.

"Heartiest congratulations to the students on reaching their 100th issue milestone! Their IT magazine has become a cornerstone in our academic community, offering invaluable insights into the latest trends and innovations.

Ms. M. Geetha
Assistant Professor
Computer Science (UG)

➢ Gamification in Education:

A close-up of an educational software interface with game components like points and badges, or a classroom scene with kids using tablets to play an educational game. Gamification in education refers to the integration of game-like elements into learning environments to enhance student engagement and motivation. This approach leverages aspects of game design, such as narratives, challenges, feedback loops, and levels of progression, to make educational experiences more interactive and immersive. By incorporating these elements, educators aim to foster a sense of curiosity and enjoyment in learners, encouraging active participation and perseverance.

Gamification can also promote collaboration through team-based activities and social interaction, facilitating a deeper connection to the material. This method seeks to transform the traditional classroom setting, making learning a more dynamic and rewarding experience.

➢ Credentialing via Block chain:

A digital certificate on a computer screen with icons or visuals related to block chain technology behind it to show security and authentication. Using block chain technology to issue, manage, and verify professional and educational credentials is known as credentialing via block chain. The decentralized and secure digital record known as block chain guarantees that credentials are easily verified and impervious to tampering.

This approach makes the credentialing process more transparent and trustworthy by enabling organizations to issue digital certificates that are stored forever on the block chain. People can confidently share their credentials with companies or other organizations because they are real and unchangeable.

Additionally, block chain credentialing expedites the verification procedure, saving money and time compared to more conventional approaches. Block chain improves the accessibility and integrity of professional and academic credentials by offering a safe, unchangeable record.

➢ Smart Classrooms:

A contemporary classroom with IoT gadgets, interactive whiteboards, and computers or tablets for student use, together with a teacher utilizing a digital tool for instruction. Cutting-edge technology is used in smart classrooms to provide dynamic, adaptable, and productive learning spaces.

"Heartfelt congratulations to the students on reaching the 100th issue of the IT magazine! Youe passion for exploring the frontiers of IT through engaging content and innovative ideas is truly inspiring"

Ms. S. Vanitha
Assistant Professor
Computer Science (UG)

REACT NATIVE LIBRARY

You can use a pre-built set of Core Components and APIs from React Native in your program. The React Native component and API sets are not the only options available to you. A community of thousands of developers uses React Native. You might be able to locate and install a community library to add the functionality you need to your app if it isn't included in the Core Components or APIs. Choosing a Package Manager React Native libraries are usually installed via a Node.js package manager, like Yarn Classic or npm CLI, from the npm registry.

The npm CLI is already installed on your machine if Node.js is installed. React Native project. Because Yarn Classic offers significantly faster install speeds and more sophisticated capabilities like Workspaces, some developers prefer to utilize it. React Native is a fantastic fit for both tools. For the sake of clarity in the remainder of this guide, we shall assume npm. Setting Up a Library Use the installation command in your project directory after navigating to it in the console to install a library. Before using the native code included in the library we installed, we must link to it. iOS Native Code Linking The majority of React Native libraries adhere to this standard, and React Native uses Cocoa Pods to handle the dependencies for iOS projects. If the library you are using doesn't, please see their README for further guidance.

Generally, the guidelines that follow will be applicable. To attach it to our native iOS project, run pod install in our ios directory. Using npx pod-install provides a shortcut to accomplish this without going to the iOS directory. Rebuild the app binary after this is finished to use your newly installed library: Connecting Native Code on an Android Device React Native manages dependencies for Android projects using Gradle. To utilize your newly installed library, you must rebuild the app binary after installing a library with native dependencies: Locating Reference Works A searchable database of libraries created especially for React Native is called React Native Directory. When searching for a library for your React Native application, start here.

React Native Community or Expo is the source of many of the libraries that are included in the directory. Volunteers and employees of React Native-dependent businesses are the driving forces behind the libraries created by the community. Their support for iOS, tvOS, Android, and Windows varies depending on the project.

"This is a great magazine which gives regular updates of various technologies in computer streams to the students and I am very much happy that this 100th Magazine was published under my guidance.. I am so honored"

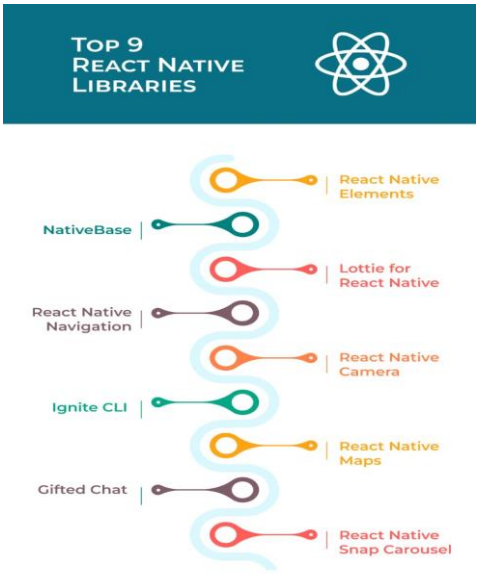
Mr. S. Jaganathan
Assistant Professor
Computer Science (UG)

This organization used to have a large number of libraries that were React Native Core Components and APIs. Expo creates Typescript libraries that support iOS, Android, and react-native-web whenever feasible. If you are unable to locate a library designed just for React Native on the directory, the npm registry is the next best option after the React Native Directory.

Although the npm registry is the best place to find JavaScript libraries, not all of the packages it contains will work with React Native. Among the various JavaScript development environments are React Native, Node.js, web browsers, Electron, and others. Libraries compatible with these environments can be found in npm. Calculating Compatibility with Libraries Does React Native support it? React Native typically does not support libraries designed for other platforms.

React-select, designed for the web to explicitly target react-dom, and rimraf, built for Node.js and interacting with your computer's file system, are two examples. Other libraries, such as lodash, operate in any environment and just make use of JavaScript language features. You will eventually develop an understanding of this, but in the meanwhile, the simplest approach to learn more is to give it a try. In the event that it turns out not to function with React Native, you can remove packages using npm uninstall. Does it function on the platforms my app is compatible with? You can filter the React

If the library you want to use isn't on that list right now, you can find out more information by reading the README file. Does it function with the React Native version of my app? Generally, the most recent version of React Native is compatible with the most recent version of a library. To determine which version of the library to install if you are using an older version, consult the README.



Does it work with my app version of React Native?

The latest version of a library is typically compatible with the latest version of React Native. If you are using an older version, you should refer to the README to know which version of the library you should install. You can install a particular version of the library by running npm install <library-name>@<version-number>, for example: npm install @react-native-community/netinfo@^2.0.0.

"As a professor, I'm thrilled to witness the 100th issue of the IT magazine created by these talented students. Their consistent delivery of high-quality content demonstrates their profound impact on the IT community. Well done!"

Dr. R. Pushpalatha
Assistant Professor
Computer Science (UG)

DIGITAL TRANSFORMATION

- **INTRODUCTION :** Digital transformation is the strategic use of digital technologies to fundamentally change business operations and customer experiences. It involves integrating technologies like AI, IoT, and cloud computing to enhance efficiency and agility.

  This initiative aims to innovate existing processes and create new business models, driving competitive advantage. Successful digital transformation requires organizational commitment, cultural change, and a focus on leveraging data-driven insights.

  Ultimately, it enables businesses to adapt and thrive in a rapidly evolving digital landscaping.

- **Definition and Scope :** Explain what digital transformation entails and how it differs from traditional business practices.

- **Technological Foundations :** Discuss the core technologies driving digital transformation, such as cloud computing, AI, IoT, big data analytics, and blockchain.

- **Impact on Business Models :** How digital transformation reshapes business models, enabling new revenue streams, cost efficiencies, and improved customer experiences.

- **Challenges and Risks :** Address the challenges organizations face during digital transformation, including legacy systems, cybersecurity risks, and cultural resistance.

- **Strategies and Approaches :** Explore different strategies for successful digital transformation, such as agile methodologies, cross-functional collaboration, and change management.

- **Case Studies :** Highlight successful digital transformation stories across various industries (e.g., retail, healthcare, finance) to illustrate best practices and lessons learned.

- **Future Trends :** Predict emerging trends in digital transformation, such as edge computing, 5G, digital twins, and augmented reality, and their potential impacts.

- **Regulatory and Ethical Considerations :** Discuss regulatory frameworks (e.g., GDPR, CCPA) and ethical implications (e.g., data privacy, algorithm bias) associated with digital transformation.

- **Skills and Talent :** Identify the skills and capabilities required for organizations and individuals to thrive in a digitally transformed world, including digital literacy and continuous learning.

"The 100th issue of the IT magazine, crafted by these students, is a testament to their continuous growth and dedication. Each edition has raised the bar in exploring complex IT topics with clarity and innovation."

Ms. K. Gomathy
Assistant Professor
Computer Science (UG)

- **Measuring Success :** Define key performance indicators (KPIs) and metrics to measure the success of digital transformation initiatives, such as ROI, customer satisfaction, and operational efficiency improvements.

What does a digital transformation framework look like?

Although digital transformation will vary widely based on organization's specific challenges and demands, there are a few constants and common themes among existing case studies and published frameworks that all business and technology leaders should consider as they embark on digital transformation.

For instance, these digital transformation elements are often cited:

Customer experience
Operational agility
Culture and leadership
Workforce enablement
Digital technology integration

While each guide has its own recommendations and varying steps or considerations, CIOs should look for those important shared themes when developing their own digital transformation strategy.

A few examples of digital transformation frameworks include:

MIT Sloan: The New Elements of Digital Transformation

Cognizant: How to Win with Digital: A Playbook for Successful Digital Transformation

Prophet: Six Stages of Digital Transformation

Ionology: A Step-By-Step Guide to Digital Transformation

"What an achievement to mark the 100th issue of the IT magazine produced by these students! Each edition has been a testament to their passion for technology and their ability to communicate complex ideas effectively. Wishing them even greater success in the future!"

Mr. A.R.Karthekeyan
Assistant Professor
Computer Science (UG)

THE EVALUATION OF CYBER THREAT

INTRODUCTION OF EVALUATION OF CYBER THREAT

One essential procedure for comprehending and evaluating the hazards associated with different digital security breaches and attacks is the evaluation of cyber threats. In order to determine vulnerabilities, possible effects, and the possibility that these threats would take advantage of holes in digital systems, a thorough analysis is required.

Organizations can assess their exposure to cyber hazards and identify the most effective mitigation methods by carrying out comprehensive studies.

In order to keep defenses flexible and resilient against new threats in the digital realm, it is imperative that they undergo ongoing evaluation in the face of increasing cyber threats.

OSCILLATING RISK:

Cyber threats can create oscillating risk patterns, with attacks and countermeasures swinging back and forth like a pendulum. The term "oscillating risk" describes how risk is dynamic and varies over time, frequently as a result of a variety of factors such shifts in the threat landscape, environment, technology, or regulations.

In contrast to static hazards, which never change, oscillating risks can rise or fall in response to outside circumstances. For example, the discovery of new vulnerabilities or improvements in protection systems may cause fluctuations in cybersecurity risks. Financial market risks are subject to fluctuations in response to economic cycles, governmental shifts, and geopolitical developments.

PENDULUM SWING OF VULNERABILITY:

Vulnerabilities can be exploited, then patched, only to swing back to new vulnerabilities ,creating a pendulum-like cycle. Similar to a pendulum's motion, the pendulum swing of vulnerability characterizes the cyclical nature of how systems and entities become more or less vulnerable over time.

This idea illustrates how times of increased security and resilience are frequently followed by times when vulnerabilities rise as a result of things like security lapses, changing threats, or antiquated defenses. For example, companies may have a false sense of security following the implementation of robust cybersecurity measures, which could result in decreased attention and maintenance, ultimately increasing susceptibility. On the other hand, a significant event may bring attention back to fortifying fortifications.

"As a longtime supporter of their efforts, I am delighted to see the students reach their 100th issue milestone with the IT magazine. Their dedication to exploring diverse facets of IT through engaging articles and expert interviews is truly inspiring. Here's to the next hundred issues!"

Ms. R. Saveetha
Assistant Professor
Computer Science (UG)

This cyclical pattern emphasizes how crucial it is to maintain strong security postures by ongoing attention to detail, adaptation, and improvement.

RESONANCE IN ATTACK VECTORS:

Attackers can exploit resonant frequencies in system,amplifying small attacks into significant breaches. The term "harmonizing defenses" describes how different security rules and measures are strategically integrated and aligned within a system or organization.

Organizations may develop a better and more resilient cybersecurity posture that can successfully mitigate a variety of dynamic cyber threats by coordinating defenses across all levels and functions.

HARMONIZING DEFENSES:

Harmonizing security controls and defenses can create a synchronized response to cyber threads, like sysnchroizing pendulums. The term "harmonizing defenses" describes how different security rules and measures are strategically integrated and aligned within a system or organization.

It entails developing a holistic and coherent strategy for cybersecurity in which various components—such as practices, regulations, and technologies—integrate to effectively fend off threats. Through complete coverage and reduced vulnerabilities, this harmonization seeks to improve defenses' overall efficacy and efficiency. Organizations may develop a better and more resilient cyber security posture that can successfully mitigate a variety of dynamic cyber threats by coordinating defenses across all levels and function.

PENDULUM-LIKE ADAPTATION:

This idea shows how adaptation comprises fluctuating stages of response and counter-reaction rather than a linear trend. The term "pendulum-like adaptation" describes the cyclical process through which organisms, systems, or organizations readjust and readapt to changing environments in a way that is comparable to a pendulum's oscillations. This idea shows how adaptation comprises fluctuating stages of response and counter-reaction rather than a linear trend. In the natural world, for instance, organisms may react to shifting environmental conditions, but they may also need to alter these adaptations when conditions change further. Similar to this, companies may innovate to meet market demands, but they also need to constantly adjust their tactics as the market changes. This continuous, dynamic process emphasizes how crucial resilience and flexibility are for successfully navigating and adapting to constantly changing circumstances.

"Celebrating the 100th issue of the IT magazine by these students is a momentous occasion. Their insightful articles and in-depth analysis have consistently impressed me and the readership. Here's to their continued success in shaping the future of technology journalism!

Ms. S. Gowthami
Assistant Professor
Computer Science (UG)

What are tech startups?

A tech startup is a company whose purpose is to bring technology products or services to market. These companies deliver new technology products or services or deliver existing technology products or services in new ways.

According to Wikipedia a startup company is: “A startup company or startup is a business in the form of a company, a partnership or temporary organization designed to search for a repeatable and scalable business model. These companies, generally newly created, are in a phase of development and research for markets. The term became popular internationally during the dot-com bubble when a great number of dot-com companies were founded.

Due to this background, many consider startups to be only tech companies, but as technology is becoming a normal factor, the essence of startups has more to do with innovativeness, scalability and growth.”

Types of Tech Startups

What is a consumer software startup?

A consumer software startup is a technology company focused on delivering products and/or services to individuals and/or households through programs (software) that operate on computers and/or mobile devices.

Some examples of consumer software companies include Facebook, Twitter, Snapchat, and Instacart

What is a consumer hardware startup?

A consumer hardware startup is a technology company focused on delivering products and/or services to individuals and/or households through physical electronic devices. Some consumer hardware startups also create software to enhance the experience of their product.

Some examples of consumer hardware companies include Apple, GoPro, FitBit, and Boosted Boards.

What is an enterprise software startup?

An enterprise software startup is a technology company focused on delivering products and/or services to businesses through programs (software) that operate on computers and/or mobile devices. These business customers can range in size from sole operators to small and medium businesses to large multinational enterprise organizations.

Some enterprise software companies are also in the business of selling enterprise hardware (e.g. Oracle sells both enterprise hardware and software) and/or consumer software (e.g. Microsoft sells software to both the enterprise and to consumers).

"The 100th issue of the IT magazine by these students is a remarkable achievement, reflecting their deep knowledge and enthusiasm for the field. Their consistent delivery of relevant and thought-provoking content has set a standard in technology journalism. Congratulations on this well-deserved milestone!"

Ms. A. Visalatchi
Assistant Professor
Computer Science (UG)

What is an enterprise hardware startup?

An enterprise hardware startup is a technology company focused on delivering products and/or services to businesses through physical electronic devices. These business customers can range in size from sole operators to small and medium businesses to large multinational enterprise organizations.

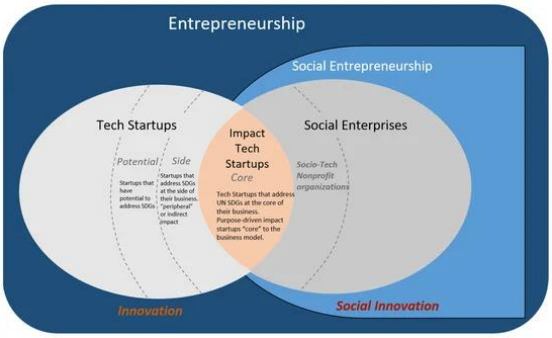
Some enterprise hardware companies also sell enterprise software (e.g. Oracle sells both enterprise hardware and software). Some examples of enterprise hardware startups include IBM, Dell, Siemens, and Cisco.

Earnings potential

If you are suited to this path, tech entrepreneurship is on average one of the highest-earning career opportunities, though the risk of failure is very high. We've found that people who have received venture capital funding or entered Y Combinator have on average earned millions of dollars per year (from increases in the value of the stake in the company), though over 50% only ended up receiving a modest salary of US$30,000-100,000 per year.

If you can make it into a seed accelerator, then you have a reasonable chance of going on to receive venture capital, so entering a seed accelerator predicts earnings of several hundred thousand dollars per year. On average, US entrepreneurs earn about 18% more than similar people who remain in salaried jobs.

This means it's possible to start from a younger age and with less personal wealth. It's also easier to iterate your idea, which reduces the personal risk, though should also reduce the expected payoff.



What does it take to progress?

Successful tech entrepreneurs are very intelligent, motivated, deeply interested in entrepreneurship, and willing to break the rules.They often studied quantitative subjects at top universities and have been involved in business from a young age.

See more on the traits of top entrepreneurs and the predictors of success in entrepreneurship.

If you're going to be working on the product side of things, being a great programmer, hacker or designer is what's needed.

The business side requires salespeople with strong social skills, who are able to cut deals and persuade key stakeholders to back the venture.

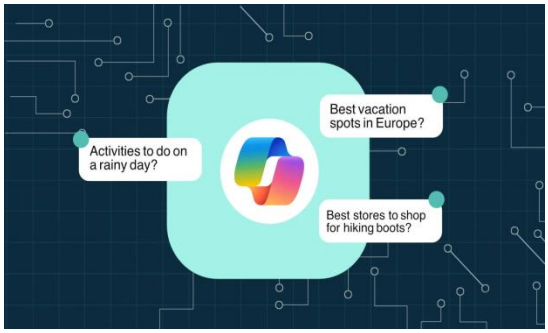
Early on, you'll need to be well rounded and probably have some technical skills, since two or three people will do everything in a small startup company.

IT Unlimited Magazine has lot of technical details and successful persons details. This magazine is reached 100th edition with students support. It's very helpful to students to know about what are the technical developments are currently going and they are motivated to get successful in their life through this magazine.

Dr. M. Manju
Assistant Professor
Computer Science (UG)

LEARN A TOOL

MICROSOFT COPILOT One of those is Microsoft, which has its own AI-infused chatbot known as Copilot (previously Bing Chat). Available directly in Windows, on the web, as a sidebar in the Edge browser, and as a mobile app, Copilot will answer questions and perform tasks, potentially proving more helpful than OpenAI's own tool.



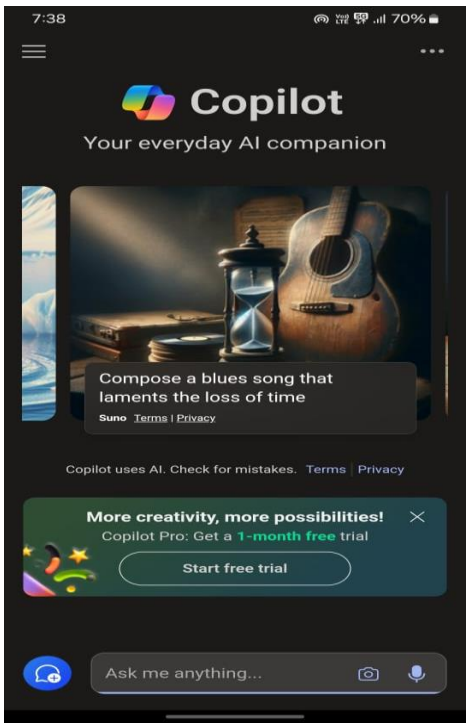
So what can Copilot do for you? Well, it can generate different types of content, from poems to songs to stories to reports. It will analyze uploaded photos, artwork, and other images.

Copilot's Designer image creator will create a logo, drawing, or other image based on your text. Through the Edge sidebar, Copilot can also provide insights on your current web page in the browser. And it can expand its skillset through Copilot GPTs and plugins.

HOW TO USE COPILOT You can access Copilot directly in Windows 11 and most iterations of Windows 10. If it's rolled out to your PC, just click the **Copilot** icon on the Taskbar, and it opens in a sidebar on the right.

To use Copilot on the web, head to the Copilot website on any browser. However, Microsoft Edge has a unique integration that allows you to interact with the chatbot through a sidebar; just launch Edge and click the Copilot icon in the upper right. You can also run it on your mobile device by downloading the Copilot app for iOS/iPadOS or Android.

Once you have the AI chatbot up and ready to use, take a look at some features that can improve your experience.



You interact with Copilot in much the same way you do with ChatGPT, but Microsoft's tool offers a few more options. Open Copilot and use the **Ask me anything** text box to enter your request. If you don't know what to ask, Copilot offers several suggested questions.

Celebrating the 100th issue of IT Magazine! Your dedication to showcasing advancements in IT through thoughtful articles and research is inspiring. Here's to many more issues that continue to push the boundaries of technology.

Dr. M. Shanmugapriya
Assistant Professor
Computer Science (UG)

On the web, for instance, you can sift through a carousel of suggested prompts.

When Copilot responds to one of your requests, it typically suggests follow-up questions that you can ask if you want to delve deeper into related areas. Click one of the follow-up questions to submit it.

When using external sources to generate a response, Copilot will list and link to the sources used. Click on a specific online source if you wish to investigate it further.

Microsoft allows you to customize Copilot's conversation style. At the start of a new conversation, you can choose between three styles to set the tone of the chatbot:

More Creative makes the responses more original and imaginative.

- **More Precise** means the responses will be more accurate and brief.
- **More Balanced** will attempt to strike a balance between the two.

Experiment with all three, though you may want to keep it at the Balanced level to start.

When Copilot responds to your prompts, several icons appear below its answer. From these icons, you can approve or reject what the AI has to say; copy text or export it as a Word document, PDF, or text file; and share the answer with someone else or hear it read aloud.In Windows, at the website, or in the mobile app, you can use your voice to talk with Microsoft's AI.

Tap the microphone icon at the bottom of the screen.

Speak your query and then submit it. Copilot will display and speak the results. Click or tap the audio level icon to stop the narration.

Microsoft Copilot is an AI-powered productivity tool that leverages the power of language models to boost productivity, unlock creativity, and enhance information understanding. It integrates with popular Microsoft 365 Apps such as Word, Excel, PowerPoint, Outlook, and Teams12.

As an AI assistant, Copilot helps you find information, create content, and get things done faster. You can try Copilot for free or upgrade to Copilot Pro for additional features and integrations with Microsoft 365 and other apps.

If you're a technical professional, Copilot provides solutions to enhance productivity, creativity, and data accessibility while maintaining enterprise-grade security and privacy features

REVIEW BOX

Towards the end of 2012, artificial intelligence (AI) scientists first figured out how to impart "vision" to neutral networks. Later, they also mastered how toenable neural networks to mimic human reasoning, hearing, speaking, and writing. Although AI has become similar to or even superior to humans in accomplishing specific tasks, it still does not possess the "flexibility" of the human brain, i.e., the human brain can apply skills learned in one situation to another.

Global attention has gradually been directed towards multi-skilled AI technology, currently referred to as artificial general intelligence (AGI). The

U.S. National Research Council (NRC) released the "National Artificial Intelligence Research and Development Strategic Plan" as early as October 2016, suggesting that the medium and long-term development of AI in the US should be focused on AGI. In 2017, Microsoft established the AGI Laboratory with the participation of numerous scientists in the field of perception, learning, reasoning, and natural language understanding

Alpha Star in October 2019 that ranked above 99.8% of its peers in complex battle scenes with players in the real world. In 2020, OpenAI developed GPT-3 [2] with 175 billion neurons. Based on this, it has developed an all-around "generalist" model with more than 30 types of functions, including database engineers, accounting, operation and maintenance, intelligent

This is close to being a capable replacement for humans. At present, China has also started to focus on this field. It now possesses a large number of talented resources and capital advantage and has a strong accumulation in specialized fields, which bodes well for future development.

It is inevitable that multi-skilled AI will become the mainstream trend in the future,However, at this juncture, there is a long path to be traversed ahead. Firstly, the major problem is the current high cost of research and development, as a result of which, the research teams are mainly concentrated in a few leading organizations. Therefore, hardware technology and model compact compression technology still need to be improved. Secondly, this technology must address the problem of high reliance on labeled data and should utilize less specific domain data up to the maximum possible extent.

"Marking the 100th publication of your magazine is a testament to your creativity, perseverance, and scholarly pursuits. Your thoughtful articles have provided valuable insights and perspectives that enrich our academic community.

Ms.S.Vidhya
Assistant Professor
Computer Science (UG)

Mind punch

1. I’m tall when I’m young, and I’m short when I’m old, what am I?
2. What loses its head in the morning and gets it back at night?
3. A farmer has 17 sheep and all but 9 die. How many are left?
4. If you build a fort, drive a Ford, and fill out a form, then what do you eat soup with?
5. What is the answer to this question?
6. Where is Captain America from?
7. What has cities, but no houses; forests, but no trees; and water, but no fish?
8. What is harder to catch the faster you run?
9. Find how it is possible?

10. Identify?

"Congratulations to the students on the 100th issue of the IT magazine! Your dedication to exploring cutting-edge topics and showcasing your technical prowess is commendable. Here's to continued success and innovation in the ever-evolving world of technology."

Ms.K. Saraswathi
Assistant Professor
Computer Science (UG)

1. What is the process at the most detailed level of the data flow diagramsknown as?
2. URL stands for_____
3. _____teams develop software solutions based on the design decisions made during earlier stages of the project.
4. _____was the first research scientist to bring the idea of the Personal Area Network.
5. Python provides one of a most popular plotting librarycalled_____ .
6. A multimedia projects said to be_____and user interactive when users are given navigational control.
7. What is the name of the method used to start a thread execution? _____
8. Which of the following will directly stop the execution of aThread?_____
9. Which will contain the body of the thread ?_____
10. Which class or interface defines the *wait(), notify(),*and *notifyAll()* methods?_____

"As a professor, I'm thrilled to celebrate the 100th anniversary of The School Magazine. Over the years, it has been a beacon of creativity, nurturing young voices and inspiring generations of readers. Congratulations to the students and editorial team!"

Ms. A. Elakkiya
Assistant Professor
Computer Science (UG)

FAMOUS AND FAVOURITES

James Gosling OC (born 19 May 1955) is a Canadian computer scientist, best known as the founder and lead designer behind the Java programming language.

Gosling was elected a member of the National Academy of Engineering in 2004 for the conception and development of the architecture for the Java programming language and for contributions to window systems.

Gosling was with Sun Microsystems between 1984 and 2010 (26 years). At Sun he invented an early Unix windowing system called NeWS, which became a lesser-used alternative to the still used X Window System, because Sun did not give it an open source license.

He is known as the father of the Java programming language.

He got the idea for the Java VM while writing a program to port software from a PERQ by translating Perq Q-Code to VAX assembler and emulating the hardware. He is generally credited with having invented the Java programming language in 1994. He created the original design of Java and implemented the language's original compiler and virtual machine.

Gosling traces the origins of the approach to his early graduate student days, when he created a p-code virtual machine for the lab's DEC VAX computer, so that his professor could run programs written in UCSD Pascal. In the work leading to Java at Sun, he saw that architecture-neutral execution for widely distributed programs could be achieved by implementing a similar philosophy: always program for the same virtual machine.

Another contribution of Gosling's was co-writing the "bundle" program, known as "shar", a utility thoroughly detailed in Brian Kernighan and Rob Pike's book *The Unix Programming Environment*.

He is an advisor at the Scala company Lightbend, Independent Director at Jelastic, and Strategic Advisor for Eucalyptus.

"Hats off to the students on the milestone of your 100th magazine issue! Your articles have consistently showcased intellectual curiosity, critical thinking, and a commitment to excellence in journalism. Keep up the outstanding work!"

Ms.S.DEEPIKA M.C.A.
Assistant Professor
Computer Science (UG)

SOLUTIONS

Mind punch solutions:

1. A candle
2. A pillow
3. Nine
4. A spoon
5. What
6. Brooklyn.
7. A map
8. Your breath
9. When it is 9 AM, add 5 hours to it and you will get 2PM.
10. Vijay mallaya

It vita solutions:

1. Uniform Resource Locator
2. Software Development
3. Thomas Zimmerman
4. MatplotLib
5. Non- Linear
6. Start()
7. Wait()
8. Run()
9. Sum()
10. Object()

"In this milestone issue, the student editorial team has woven together a tapestry of diverse voices, celebrating imagination, resilience, and growth."

Ms.S.DEVIPRIYA M.C.A.
Assistant Professor
Computer Science (UG)

"Warmest congratulations on achieving the 100th issue milestone! Your dedication to producing high-quality IT content showcases your expertise and enthusiasm for the field.

Ms.S.M.Janani
Assistant Professor
Computer Science (UG)

The editorial boared expresses its sincere gratitude tto all those who are responsible, either by being on the stage or behind the screen for the successful launch of the magazine

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