

Impact of current information technology on our lives assignment



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Probably one of the most significant developments in human history since the printing press. It has given rise to one of the most fascinating communications devices ever created, the Internet. It has come into our homes, our schools and our offices, tying us together in unprecedented ways. It is one of the most important developments in recent memory. Information technology (IT) is the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by a microelectronics-based combination of computing and telecommunications. The term in its modern sense first appeared in a 1958 article published in the Harvard Business Review, in which authors Alleviate and Whistle commented that “ the new technology does not yet have a single established name. We shall call it information technology Some of the modern and emerging fields of Information technology are next generation web technologies, bioinformatics, cloud computing, global information systems, large scale knowledge bases, etc. A.

GENERAL INFORMATION IT is the area of managing technology and spans wide variety of areas that include computer software, information systems, computer hardware, programming engages but are not limited to things such as processes, , and data constructs. In short, anything that renders data, information or perceived knowledge in any visual format whatsoever, via any multimedia distribution mechanism, is considered part of the IT domain. IT provides businesses with four sets of core services to help execute the business strategy: business process automation, providing information, connecting with customers, and productivity tools.

IT professionals perform a variety of functions (IT Disciplines/Competencies) that ranges from installing applications to signing complex computer networks and information databases. A few of the duties that IT professionals perform may include data management, networking, engineering computer hardware, database and software design, as well as management and administration of entire systems. Information technology is starting technologies, and more into integrations of other technologies such as the use of cell phones, televisions, automobiles, and more, which is increasing the demand for such jobs.

In the recent past, the Accreditation Board for Engineering and Technology and the Association for Computing Machinery have collaborated to form accreditation ND curriculum standards for degrees in Information Technology as a distinct field of study as compared to Computer Science and Information Systems today. SITE (Special Interest Group for IT Education) is the ACM working group for defining these standards. The Worldwide IT services revenue totaled \$763 billion in 2009. B.

TECHNOLOGICAL CAPACITY AND GROWTH Hilbert and Lopez identify the exponential pace of technological change (a kind of Moor's law): machines' application-specific capacity to compute information per capita has roughly doubled every 14 months between 1986-2007; the per capita opacity of the world's general-purpose computers has doubled every 18 months during the same two decades; the global telecommunication capacity per capita doubled every 34 months; the world's storage capacity per capita required roughly 40 months to double (every 3 years); and per capita broadcast information has doubled roughly every 12. Years The wide range of <https://assignbuster.com/impact-of-current-information-technology-on-our-lives-assignment/>

information, data, and knowledge for problem solving and decision making are dealt with Information Technology. Before starting with the projects, students should be aware of authentication, and integrity features in their projects. Breaking of passwords and hacking can be avoided using these techniques. Anyhow, the various trends for projects are based on the emerging software technology. A. LATEST TRENDS a. Flash technology To add multiple types of external data to the given text, images, video, XML and to interact with web pages, Adobe Flash is used.

It provides multimedia platform. The main purpose of this technology is to be used in advertisements and games. Both audio and video streams are supported by flash. One of the Object-oriented languages called Conscript is the language used here by the developers. Flash layer includes Conscript Virtual Machine (BAM). The compiler, Just-Len-Time TOT), is used for MPH-based audio and bitmap graphics. Flash CSS is the latest version of Adobe flash which was released on April 12, 2010.

Microsoft Silversmith is developed on web framework and is similar to the functions of those in Adobe Flash. In addition, it also integrates multimedia graphics and (CLIP) and its development tools are supported by Silversmith. The processor ex. with streaming SIMD Extensions (SSE) is used by Silversmith. Also the other processors which support Silversmith include the Intel Pentium III and MAD Etalon XP. Any of he . Net Programming language is supported for Silversmith applications. The developing tools for the application can be used along with the .

Net language but should be aware that they can target only the SilverSmith core CLC for hosting the applications and not that of the . Net Framework CLC since both differs in their own functionalities. GRID (4. 0. 50524. 0) is the latest version of SilverSmith and was released on 03 June 2010. C. Open Source software Open source software is newly emerging trend which is one of the best options for the students. The source code can be modified by the students as per the objective f project. Hence Open source is much flexible than closed version software.

Open source software is mainly developed on peer to peer production by collaboration of end product, source material. Open source software can be enhanced by anyone and if you Join some open source developers community, you can learn a lot of things directly from the most knowledge persons in the developers community. Even the top companies like Google who are paymasters gives lots of importance to candidates who have worked in open source projects during the interviews. Cryptography is the practice and study of hiding information. It also refers to confidentiality.

It is often seen as a “ black art”, which means something others don’t understand but you need to understand. Cryptography is one of the essential aspects for secure communication. There are many aspects of security and applications ranging from secure commerce to private communication and to protect passwords. Cryptography is necessary for secure communication but it is not sufficient by itself. Here, the text is encrypted first; I. E. The plain text is changed to inarticulate garbage. The end user does the reverse process I. E. Decryption, where he original text is retrieved.

There are a lot of algorithms in this area which is used in real time for data protection in sectors like banks, Research, Password Protection and so on. E.

Nanotechnology Nanotechnology is the study of controlling properties of an atom and molecules. As the name indicates, it deals with the study of structures sized between 1 and 100 nanometer. It is said that, nanotechnology has a tendency to create new materials and devices which can be used in future in a wide range of fields such as medicine, structures have a tendency to change its state for transformation of energy.

The two main approaches used in nanotechnology are Bottom-up and Top-down. In bottom- up approach, materials and devices are built from molecular, a component which later assemble themselves chemically and follows the principles of molecular recognition. In top-down approach, Nano-objects are constructed from larger entities without any atomic level control. Biotechnology is the best example to show the use of nanotechnology in various fields. The upcoming trends mainly focus on security and hacking. Mobile application for phone and Android are great areas to explore with good revenue opportunities as well.

If you want to stand out from others, instead of going for some courses, try to contribute for an open source project. B. **BUSINESS TRENDS** Just a few decades ago, businesses had little in the way of office machinery except typewriters. Fax machines were new; only Xerox made copiers, and the computer was a monster that took up an entire room. These behemoths were housed almost exclusively on college campuses or in government laboratories. With the development of the personal computer, the situation changed; it was so quick it sometimes seems like it was overnight.

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At first, businesses were happy to use amputees because their word processing programs made typing projects much easier. But using a computer like a high-powered typewriter defeats the purpose of having the machine in the first place. Companies soon discovered that their PC's could do a great deal more. Companies began to network offices together so that they could share files and work on the same projects from distant locations. They connected to the Internet and put out advertisements to draw new customers. And perhaps one of the most significant business developments to come with IT is the creation of the electronic marketplace.

Companies that sell their products over the Internet greatly increase the number of potential consumers who see their offerings. Even if the company is not actively selling goods, a website is a tremendously helpful tool. A well-designed, easy to navigate site can stimulate interest so that a potential customer calls or writes for further information. Other business applications of IT include " data mining," " knowledge management," and " modeling and simulation. " (Kali, PIG). This last is particularly interesting, as it allows companies to build prototypes in the computer.

These prototypes perform exactly the same way a here-dimensional model would, and yet are far less expensive than building the " real thing. " This way, if the prototype doesn't work, there isn't the strain on the company's resources there would be if a real model (car, plane, truck, train) had been built. If it does work, it can be put into production quickly. C. FUTURE

INFORMATION TECHNOLOGY TRENDS There's no denying that we are in a worldwide downturn. Government are in debt; there is a way to plan for the declining eminent and that is through IT guidance.

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If you are like most people, the last thing on your opinion is paying for tuition, specially in a specialty as baffling as information technology.

However, IT education may be your label out of the slump and into a fulfilling and stable career. For most of us, our prospect is not set in pelt, especially with the downturn. There is no concrete way of aware that you will forever be in the site, or even with the visitors you are with now. However, IT guidance can organize for a potential in information technology at any sector.

The diligence needs IT technicians whether you work in television, marketing, communication, client check, etc. IT technology can open doors o more than just your own effective Future Information Technology Trends environment. You can take these skills and concern them to other sectors and industries as well. This will make the leap to another career in the upcoming much fewer overwhelming, if that time ever comes. Technology and Telecommunication: While many people are trailing their jobs in marketing, buyer ceremony, factual estate and construction, more and more people are verdict their mission via telecommunication.

This is because, while the nation is gradually lessening, the “nation” is blossoming. Websites are in stable penury to IT elf including webmasters, graphic designers and programmers. This Future Information Technology Trends trend will prolong as the internet is one of the best customs to join to the world and will only maintain to grow in the future. Technological trends in the future: According to the Bureau of Labor Statistics, the technology world will maintain to upsurge with jobs in IT increasing by 16% in the next ten existence.

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This is sooner than most other industries in the United States due to the many technological advances within many industries. IT Training for all Industries: even if you never want to dine in a career as an IT changing, information technology exercise can help prepare you for advancement in your own sector. Information technology exists everywhere and this is why it's important to advantage the skills desirable to understand the information technological phase of your sector.

IT is Universal: Another important touch of information technology is that, while some systems modify from troupe to troupe, and from country to country, they are all relatively the same. This means that, if you desire to do so, you can move and convey with career guidance in IT. Spend a year in Japan since the sights and running in IT on the section, or take your skills to Australia when the frost months get too cold. The possibilities Future Information Technology Trends for those with information technology training not only transport from trade to industry, but they also outdo continental boundaries as well. D.

EMERGING INFORMATION TECHNOLOGY TRENDS Traditionally, hotels were mostly dependent on cards and paperwork at the front desk to keep in meet with old and current customers. They were chiefly at the mercy of the wishes of vacationers to succeed, and on their own pains and force to be ND old-fashioned methods are long since ancient, gratitude to advances in information technology. The first question in which information technology became important regarded billing. Old-fashioned paper-based book-keeping time- consuming and inefficient, and was not able briefly to tell a lodge holder what the avow of their lodge was.

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Luckily, advances in modern proof keeping tolerate for a lodge holder to keep pathway of what they have on hand, how much of it they have, and how much it outlay. Accounting is complicated, but future software, especially that tailored to the sole deeds of the hospitality activity, helps to permit lodge owners to make smart decisions. Services and harvest that are no longer worn can be instantly cut off to prelude money, while those who show want can be augmented in magnitude or bespoke to diminish the important tradition.

Most hotels are recurring with booking quarters and reservations over the telephone, but information technology has prolonged well past that. Hotels can now work with different online trek companies and booking military to have Emerging Information Technology Trends their rooms booked online, with no indigence to employ classy force. This also allows a lodge to announce their open rooms and unusual deals promptly to people who would be most to grasp them, instead of killing much money advertising in an unfocused mode.

High worth information technology hence allows for better arrangement and management of booking to tolerate a lodge to better maximize residence, and to know in proceed when large groups or prop period are approaching. This allows a lodge manager to make strategy about transient pole, good times to renovate or inflate, or other concerns, because he/she can decide the state of their hotel errantly and for the next few months with only a few clicks on the laptop. The advances in information Emerging Information Technology Trends technology proffer well afar booking, however.

The internet is necessary for vacationers who fancy to associate those back home, and for those nomadic on topic to get in feel with the bureau.

Therefore, wireless internet has become a very ordinary and very helpful tune for hotels to supply. Many interest minded persons even entail that an hotel tender internet army so that they can keep running while on the street. Luckily, such army are easy to supply, as al that is required is a wireless router and diverse plans to guarantee the whole hotel is filled with the practice.

Modern advances in wireless internet also permit for the wireless internet provided for hotel visitors to be used to group the hotel itself. Security cameras, door stresses, and other policy basic to hotel sanctuary and shelter can be Emerging Information Trends wired into the interact, so that workforce are alerted when a door is propped open, a fire alarm goes off or suspicious activity occurs. Though the hotel guests are wholly unaware of it, this variety of added safety ND guarantee keeps them careful, and in the occasion of a puzzle they will almost surely appreciate the benefits of such system.

As difficult as it is, information Intelligent booking systems enable hasty and helpful guest opinion, along with the ability to predict who is likely to use the hotel again and tell them via e-packages or passage letters when a good deals appear. Hotels with scope mass or other guest services can tender menus online, allowing for abrupt updates, high-class photos, and other behavior to allow guests to see and order services before they even arrive.

One of the advantages and payback of fitness tending technology s the additional people are extant diseases like feeling and blight disease due to the fitness to identify them earlier than formerly skilled. With this ability comes the subsidy of being able to use a method that may be fewer extreme than one beloved as the disease grows. With a disease like Tuberculosis, as it metastasis's, the talent to struggle it and eliminate it gets harder and harder.

Although, one more use of technology in healthcare has brought us newest drugs that can aim more precisely the particular scourge cells along with being more embattled in other areas. It has also brought us latest radiation Healthcare Information Technology Trends tools that can be far extra accurate and not have to use the shotgun manage to dig up to the tumor. The ray could even be bent about key body parts like glands and arteries so as not to injure them when focusing in that territory. One interesting and futuristic loan is the utilization of robots.

You can now have a preset protectorates with an outcome that may be to the profit of the enduring. With the use of a robot in surgical procedure there is a slighter Healthcare Information Technology Trends opening and large incisions which is fewer torment for the learnt, there is a smaller quantity of blood failure, an exclusive hazard of rigid cuts about delicate nerves and tendons which may allow the unwearied a pompous choice of not having poorer effects from the surgical procedure, and typically a shorter drape about in the hospice and a shorter recovery time.

The accuracy of the robot is far more rigid than a surgeon using his/her hands lonesome. Robots are also programmed in such way that they can grip complicated situations. Another zone where robots are worn is in mandatory middle surgery. Again the accuracy and precision of the tools show the way to a bigger unplanned of a quicker usability of less blood harm are one advantage to using robots in a middle surgery. The dab Vinci Healthcare Information Technology Trends robot worn in the heart and growth surgeries and has the opportunity to be worn in a range of areas where precision and accuracy are vital.

Although computers are now common in the classroom that has not been the most significant step in their use as educational tools. I believe that distinction has to go to distance education. The concept is not all that new, because the idea of remote classrooms with a teacher appearing on television has been in place for decades. But the idea of inducting an entire class over the Internet is radically different. In distance education, the students may never set foot in a classroom at all.

They will interact with the teacher and with their peers via email; they may participate in lectures via some sort of instant messaging service. The assignments are posted by the instructor, and the completed assignments are returned to him/her through email. Attending class by accessing the Internet does of course mean that the student cannot participate in a live exchange with his peers and the instructor, so in that sense the spontaneity of the classroom is missing. However, for students in very remote areas, or when classes are offered at one campus and not another, it is a viable

solution, and it is made possible by IT. V. PERSONAL USAGE Of course the <https://assignbuster.com/impact-of-current-information-technology-on-our-lives-assignment/>

single biggest item here is the personal computer. Having a computer at home has revolutionized life for millions of people around the globe. We tend to get our news from the computer; we may find ourselves in a discussion with someone on the other side of the planet; and we tour museums and shops in distant cities among many other uses. Many people now work from home (“telecommuting”) rather than physically going to the office. This saves road congestion and helps diminish pollution.