IT TRUMPET

Newsletter
Department of Information Technology
Government Polytechnic For Girls, Ahmedabad

December-2018 Volume-1 (June-18 to Nov-18)

Our Vision

To be a centre of excellence for girls in Information Technology by preparing them to be efficient problem solvers, innovators and entrepreneurs in the era of dynamic IT field as well as to empower women by providing roadmaps that foster professionalism, humanism and social responsibility.

Our Mission

- To provide excellent field related technical knowledge and skills.
- To foster interpersonal and leadership skills through co-curricular and extracurricular activities and thus develop a thirst for lifelong learning among students.
- To create a vibrant and an intellectually stimulating environment for students to empower them for real world problem solving.

Message from HOD

Dear Readers,

It is bliss for our department to commence the first newsletter "IT Trumpet". This will provide platform for students as well as faculty members and other stakeholders including computer industries and alumnae of this department to share their knowledge views and achievements.

I would like to thank my Team IT participated in commencement of this newsletter by editing, proof reading this bit and implementing my idea and realizing thought in to reality with quite committed platform for technological, innovative, creative skills and forth coming development in field of information technology as well as its diversification for enhancing lifelong learning and project management with team building skills. The newsletter publish twice in a year at every end of the semester. I again acknowledge the efforts put by my student's team and faculty members to turn "IT Trumpet" into reality.

Ms. Priti N. Parikh

Our Top Rankers in Institute and University (Summer 2018)

Sr. No	Enrolment No	Name	Semester	Rank
1	176140316094	Rawat Muskan Pramod	2	5th rank in GTU top 10
2	176140316088	Rakholiya Armikaben Dineshbhai	2	6th rank in institute top 10
3	176140316115	Thakkar Tulsi Mayurbhai	2	9th rank in institute top 10
4	176140316068	Patel Drashti Vipulbhai	2	10th rank in institute top 10
5	166140316108	Sharma Bhumi Bhupendra	4	1st rank in institute top 10
6	166140316065	Patel Apexa Mahendrakumar	4	7th rank in institute top 10
7	166140316109	Shukla Twinkle Prashantbhai	4	8th rank in institute top 10
8	166140316106	Shah Shikha Pragneshkumar	4	9th rank in institute top 10
9	166140316084	Patel Vaibhavi Alpeshbhai	4	10th rank in institute top 10
10	156140316122	Vatsraj Aanchal Hiren	6	5th rank in institute top 10
11	156140316043	Mavani Hrishita Samir	6	6th rank in institute top 10
12	156140316125	Vyas Shrushti Snehalkumar	6	8th rank in institute top 10

Know Something New

Ngram એ ગૂગલનું એક એનાલિટિકલ પ્લેટફોર્મ છે. જે પાછલાં ૨૦૦ વર્ષ દરમિયાન આખાય વિશ્વમાં પબ્લિશ થતાં પુસ્તકોમાં વપરાતા વિવિધ શબ્દોનું મોનીટરીંગ અને એનાલિસિસ કરે છે. પુસ્તકોમાં કયા કયા શબ્દો ક્યાં ક્યાં અને કેટલી વાર વપરાય છે તેની નોંધ અને ટ્રેન્ડ પર નજર રાખે છે. પ્રસ્તુત કરેલા ફોટો-ગ્રાફમાં જોતા ખબર પડે છે કે સ્માર્ટ, ઉદારતા (જનરસ) અને ભલાઈ (કાઈન્ડનેસ) શબ્દોમાં કાઈન્ડનેસ હજુયે મેદાન મારી જાય છે.
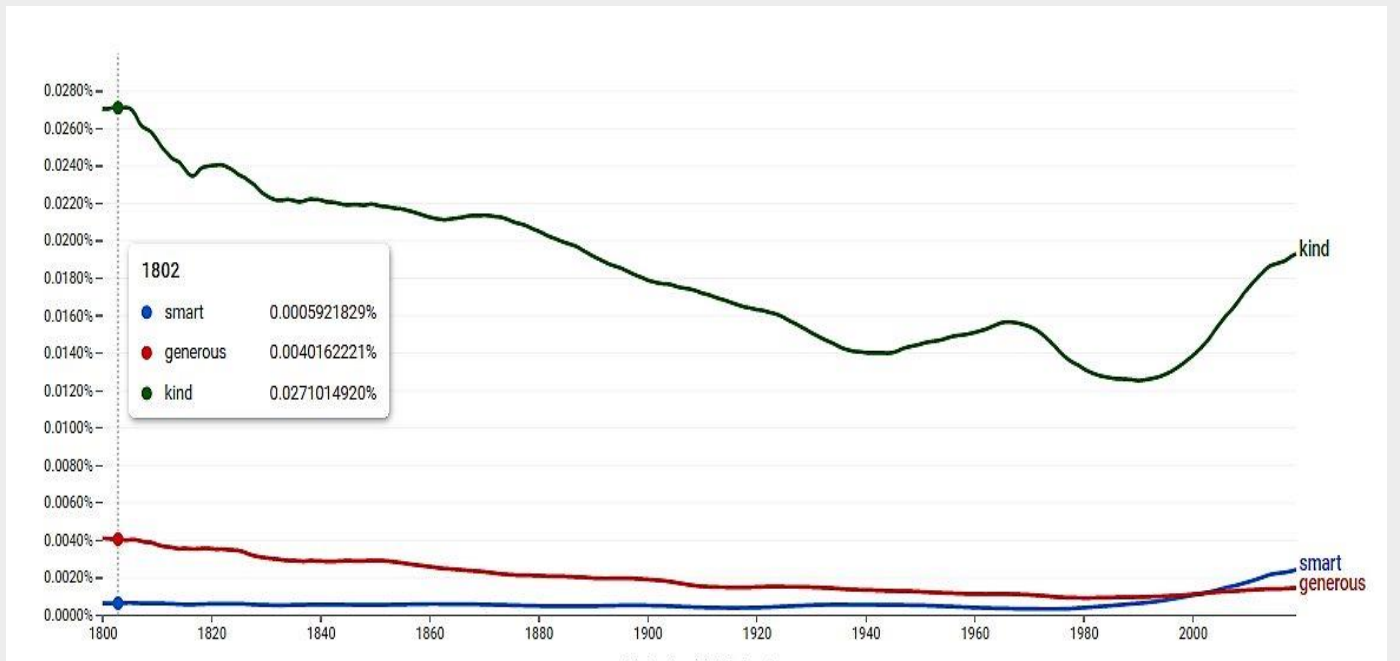
5 High paying IT jobs to consider in 2019

Learning to code can open a wide array of career opportunities for anyone wanting to make it big in the IT sector or for that matter any other industry, as is clear from the fact that even legal and education sector hiring software engineers.

Before you decide to take that plunge and explore lucrative career opportunities in IT, consider the following exciting job roles in IT to brighten your career prospects:

1. Cybersecurity

You are thinking on the right lines if you are looking to become a Certified Ethical Hacker.

Cybersecurity is the hottest career opportunity right now. The proliferation of internet and internet-enabled services has created a need for large number of cybersecurity professionals. There are several job openings in cybersecurity but there exists a talent shortage. According to Pay Scale, the average salary of a Penetration Tester in India is anywhere around Rs. 4,08,318. The salary of an Information Security Manager is around Rs 12,08,225 per annum.

2. IT Project Management

IT project management job is best suited for management graduates with some background in IT. These professionals are responsible for outlining the company's overall technology goals and implementing them. Along with basic tech skills and knowledge, project managers also need to have good business acumen, communication, and organizational skills.

3. DevOps

DevOps is an amalgamation of the words "development" and "operations" and is more of a mind-set change that focuses on drawing synergies between cross-functional teams. DevOps professionals are tasked with combining the development and business operations activities and work in a collaborative effort to achieve the desired outcomes. It is important to have a deep knowledge of software development for this role. Companies look to hire for some experience in software development before hiring for DevOps role. The command over non-technical skills is another desired trait to have for DevOps professionals.

4. Data Science

Data is the new oil. Companies are getting actionable insights by making sense of the avalanche of structured and unstructured data that was previously not analysed. With the advent of technologies like big data and machine learning, companies are hiring for data scientists. The demand for data scientists is the highest in sectors like banking and finance, retail and aviation. If you are looking to make it big in the field of Data Science you need to have strong analytical thinking abilities, programming knowledge, and mathematical skills.

5. Software Development

The demand for software engineers has been on the rise in the last few decades. Knowledge in popular programming language skills like Python, Java, Ruby, C++, etc. can help you build a good IT career.

By Patel Drashti(5th Sem)

What is internet of things (IoT)?

The internet of things, or IoT, is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

A thing in the internet of things can be a person with a heart monitor implant, a farm animal with a biochip transponder, an automobile that has built-in sensors to alert the driver when tire pressure is low or any other natural or man-made object that can be assigned an Internet Protocol (IP) address and is able to transfer data over a network.

Increasingly, organizations in a variety of industries are using IoT to operate more efficiently, better understand customers to deliver enhanced customer service, improve decision-making and increase the value of the business.

Each physical object are provided with unique identifiers and connected over network. The Internet of Things (IoT) consists of all the web-enabled devices that collect, send and act on data they acquire from their surrounding environments using embedded sensors, processors. These devices often called smart devices.

Why is Internet of Things (IoT) so important?

Over the past few years, IoT has become one of the most important technologies of the 21st century. Now that we can connect everyday objects—kitchen appliances, cars, thermostats, baby monitors—to the internet via embedded devices, seamless communication is possible between people, processes, and things.

By means of low-cost computing, the cloud, big data, analytics, and mobile technologies, physical things can share and collect data with minimal human intervention. In this hyperconnected world, digital systems can record, monitor, and adjust each interaction between connected things. The physical world meets the digital world—and they cooperate.

By Shukla Twinkle Prashantbhai(5th Sem)

Blockchain will reveal new opportunities in different industries

Everyone is now talking about blockchain, a revolutionary decentralized technology that stores and exchanges data for cryptocurrencies. It forms a distributed database with a digital register of the transactions and contracts. Blockchain stores an ever-growing list of ordered records called blocks, each containing a timestamp and a link to the previous block. Blockchain has impressive prospects in the field of digital transactions which will open new business opportunities in 2018.

This technology also uncovers many new possibilities with various applications in various other fields. Due to the growing role of social responsibility and security on the internet, the blockchain technologies are becoming increasingly relevant. In a system using blockchain, it is nearly impossible to forge any digital transactions, so the credibility of such systems will surely strengthen. This approach can become fundamental for disruptive digital business in enterprises and startups. Companies, previously operating offline, will be able to translate the processes into the digital environment completely.

Business needs to account for the blockchain risks and opportunities and analyze how this technology can influence the customer behavior. As the initial hype around blockchain in the financial services' industry will slow down, we will see many more potential use cases for the government, healthcare, manufacturing, and other industries. For example, blockchain strongly influences the intellectual property management and opens new insights in protection from copyright infringement. Some websites like Blockai, Pixsy, Mediachain, and Proof of Existenceintend to apply the blockchain technology for this purpose.

Article From K D Gadgets

Why You Should Learn Python..?

Not convinced that Python is the right language for you? Well, it's time to change your mind.

1. Ease of use for beginners

First and foremost, Python is one of the easiest programming languages to learn. You don't need to have any programming experience to start performing data analysis in Python.

2. Quick application development time

Owing to the myriad of open-source data analysis libraries, developing fintech applications in Python doesn't take nearly as much time as it does with data analysis tools such as Microsoft Excel and R because you don't have to waste time writing code from scratch.

3. Plenty of online learning resources

The biggest challenge for beginner programmers is finding useful tutorials and resources. Fortunately, the OFFICIAL PYTHON DOCUMENTATION unpacks everything you need to know about the language—and since Python is already simple enough as it is, picking up the language is fairly straightforward.

4. Extensive data visualization support

The R programming language, Python's biggest competitor in data science, is credited with providing excellent data visualization libraries. But Python is quickly catching up—with data science packages like PLOTLY, GGPLOT, and PANDAS, you can create professional plots and other forms of data display.

5. Open-source libraries

Python has plenty of open-source libraries that extend the core language's functionality.

6. Leading companies are using Python

Octave and MATLAB, step aside. Python isn't just for casual programming—it's being used by leading companies in a variety of fintech fields. For example, Bank of America's Quartz and J.P. Morgan's ATHENA platforms both use Python, and big companies like Google, Facebook, Instagram, and Spotify also use Python in their development.

Top 10 Python Articles For Beginners

1. Python For Beginners Udemy
2. Code Academy
3. Real Python
4. Python For Beginners Coursera
5. Beginners Guide of Python.org
6. Codementor
7. Tutorials Point
8. Python Tutor
9. Python Spot
10. Google's Python Class

Some Top Youtube channel to learn python

1. freeCodeCamp.org
2. Programming with Mosh
3. Real Python
4. Clever Programmer
5. thenewboston

Reference: learnpython.com

By Rikita D Parekh(Lecturer IT)