KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE

foCuS

THE NEWSLETTER

Issue-13

START

COMPUTER_SCIENCE

11:11

-THE DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING.

VIEWS

It gives me great pleasure to know that the next issue of newsletter is ready. I congratulate all those who have contributed in bringing this out. I appreciate the editorial board of the newsletter for their efforts in collecting and compiling the data without which it would have not been possible to place this newsletter in your hands.

-Dr. Y. Manohar (Director)

I am very much pleased with the idea of this newsletter. This is really a very good effort to keep students abreast of the new technological trends .

-Dr. P. Venkateshwar Rao (Principal)

It gives me immense pleasure to announce the release of our department newsletter "foCuS". The unique feature of this newsletter is that it is being planned and designed by the student fraternity alone.

-Dr. P. Niranjan Reddy (Head of the Department)

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Dr. P. Niranjan Reddy
Head of the Department

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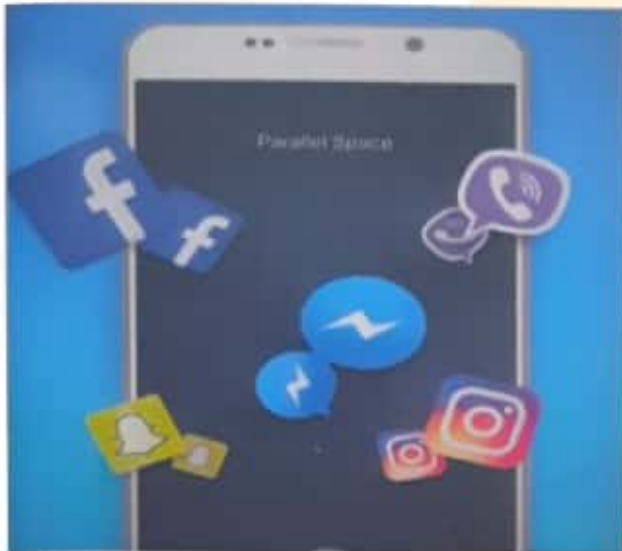Associate Professor

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PARALLEL SPACE

Parallel Space gives a user the ability to log into two different user accounts simultaneously by creating a separate (parallel) space on the Android device. Most apps in Google Play Store are compatible with Parallel Space. With this app, anyone can now could create, login and manage two accounts for each of Facebook, WhatsApp, Snapchat and even Uber. Parallel Space works pretty well with mobile games too. Now, a user can have two game accounts in exciting games such as Clash of Clans, Clash Royale, and Candy Crush Saga, etc.

Parallel Space helps safeguard a user's privacy and safety as well since it does not need root access. The newly updated version – Parallel Space 2.2 – allows a user to install and use the apps in an untraceable way. A person can keep his or her private apps in an independent space on Android without revealing any private information. In addition, the "App Lock", a feature from Parallel Space 2.2, allows a user to set up password or lock pattern for his/her Parallel Space. The user also has the flexibility to allow/block notifications from the apps which are installed in Parallel Space 2.2.

The virtual environment is created by creating something like qemu user mode. The qemu is used to switch between multiple operating systems, or processes from one CPU to the other. So, basically you are running your app on an emulator rather than mobile directly. So, it allows you to have multiple accounts on a virtual environment.

~M. KRISHNA VAAGDEVI, B14CS059

BLOCKCHAIN TECHNOLOGY

BlockChain Technology [BCT] is an emerging technology suitable for decentralized and transactional sharing of sale across a large network of untrusted participants. By using this technology, one can maintain continously growing list of records called blocks and link them in a distributed manner(blockchain), potentially in such a way that these are secured against tampering. A blockchain facilitates secure online transactions. The primary use of blockchains today is for the creation of cryptocurrencies, such as bitcoin.

The first blockchain was conceptualised by Satoshi Nakamoto in 2008 and implemented the following year as a core component of the digital currency bitcoin, where it serves as the public ledger for all transactions.

~S. SWAPNA, *Assistant Professor*

JOB MANTRA

Placements in Campuses are creating a huge competition day by day. The demanding nature of jobs have created a whole new perception in our minds. Companies these days come up with different ways of recruiting, which is intense and filters the skill and knowledge perfectly. Aspirants work day and night harder to get a desired job but fail themselves at the communication or the presentation, differing one on its own other.

In the first year, concentrate mostly on how it all works and figure out what it takes to be a part of your desired company. Improve your Verbal/Communication skills. Motivate yourself, read the success stories of the personalities you admire. The most important thing is to overcome the stage fear.

In the second year, develop positive vibes in yourself. Think about what Industry demands. Have the latest information, do an Internship. Prepare for seminars and participate in technical contests in fests.

In the third year, do a project yourself. Prepare your resume, fill in the skills that you are sure and perfect about. Know your move, have knowledge about the major technical flagships that happen in the industry. Remove the Cut-Copy-Paste method in life.

In the final year, be thorough with your skill-set you developed. Attend/Watch how the interview process goes on. Have a list of companies that you desire to step in, know about the companies and the skills they require. The last but the most important thing is be confident, not over-confident.

This is the basic scenario you have to look upon for an interview

~G. NEELAVENI, *Soft skills Trainer*

GHOST PUSH

Ghost push is a kind of malware that infects the Android OS. It gains the root access, downloads malicious software, converts them into a system application and makes the device to lose the credentials over the data on the device. Ghost Push makes a device hard bricked and cannot retrieve its original space. This malware is designed by the cyber bullies and is spread across the application stores and other third party stores. Few of the android applications that were attacked are Assistive Touch, Memory Booster, Talking Tom 3 and many more.

Ghost Push was first found out by the CM security team. Ghost Push symptoms can be determined by the excessive usage of cellular data, reduce in battery efficiency and installation of apps without permissions. The Device tends to lose its control when it's under a Ghost Push attack. This research was done by the Cheetah Mobile Corporation and they have come up with their android applications, Clean Master and CM Security, to protect the devices from malicious software.

– P. SAI SHARAN, B14CS028

FOG COMPUTING

Fog computing, also known as fogging, is an architecture that uses one or a collaborative multitude of end-user clients to carry out a substantial amount of storage (rather than stored primarily in cloud data centres), communication (rather than routed over the internet backbone) and control, configuration, measurement and management (rather than controlled primarily by network gateways such as those in the LTE core).

Fog computing can be perceived both in large cloud systems and big data structures, making reference to the growing difficulties in accessing information, objectively. This results in a lack of quality of the obtained content. The effects of fog computing on cloud computing and big data systems may vary; yet, a common aspect that can be extracted is a limitation in accurate content distribution, an issue that has been tackled with the creation of metrics that attempt to improve accuracy.

Fog networking consists of a control plane and a data plane. For example, on the data plane, fog computing enables computing services to reside at the edge of the network as opposed to servers in a data-center.

Compared to cloud computing, fog computing emphasizes proximity to end-users and client objectives, dense geographical distribution and local resource pooling, latency reduction for quality of service (QoS) and edge analytics/stream mining, resulting in superior user-experience and redundancy in case of failure.

~R. SWAPNA, *Assistant Professor*

O2 + H2 OS

OnePlus has been shaking the industry from the very start. They offer great hardware at unbelievable prices, but they have been divided in the software department. They created Oxygen OS for the general market, while their Chinese customers get to use Hydrogen OS. The former offers a much more clean interface that looks very much like Vanilla Android, while Hydrogen OS is tweaked in a heavier manner.

Running separate software versions that cater to multiple markets may be convenient to attract more users, but this equation comes with its downsides. This is why OnePlus has decided to bring its software teams together in order to achieve a single, optimal user interface. And it seems the main reason for doing this is improving update times, which they know they are not exactly the best at.

Bringing their teams together would allow for developers to put all their focus on a single UI, helping them push updates faster, as well as giving them more room for growth and improvements.

A big part of the plan is to use feedback from the community to see what features should stay or not. Community Builds seem to be important, as they are allowing OnePlus to evaluate what would be more universally accepted by the general public.

~M. KRISHNA VAAGDEVI, B14CS059

INTERNET OF THINGS

The "Internet of things" (IoT) is becoming an increasingly growing topic of conversation both in the workplace and outside of it. It's a concept that not only has the potential to impact how we live but also how we work. But what exactly is the "Internet of things" and what impact is it going to have on you, if any? There are a lot of complexities around the "Internet of things" but we will stick to the basics.

Simply, this is the concept of basically connecting any device with an on and off switch to the Internet (and/or to each other). This includes everything from cell phones, coffee makers, washing machines, headphones, lamps, wearable devices and almost anything else you can think of. This also applies to components of machines, for example, a jet engine of an airplane or the drill of an oil rig.

As it is mentioned, if it has an on and off switch then chances are it can be a part of the IoT. The analyst firm, Gartner, says that by 2020 there will be over 26 billion connected devices. That's a lot of connections (some even estimate this number to be much higher, over 100 billion). The IoT is a giant network of connected "things" (which also includes people). The relationship will be between people-people, people-things, and things-things.

On a broader scale, the IoT can be applied to things like transportation networks: "smart cities" which can help us reduce waste and improve efficiency for things such as energy use; this helping us understand and improve how we work and live.

~K. JUGAL KISHORE, B14CS037

ACHIEVEMENTS

V. Shankar, Associate Professor of CSE dept. has recieved a doctorate from Kakatiya University in December 2016 for his thesis titled "Efficient Iceberg Query Evaluation using Compressed Bitmap Index Technique in Distributed Databases" under the guidance of Dr. Guru Rao, Director of Evaluation, S.R. Engineering College.

V. Swathy, Assistant Professor of CSE dept. has recieved "Best Paper Award" in International Conference IEEE ICACCS-2016 at SVS College of Engineering, Coimbatore.

Dr. P. Suresh Kumar, Assistant Professor of CSE dept. has published chapters naming "Data Analytics for Childhood Pneumonia Monitoring" and "Cloud Based Wireless Infrastructure for Health Monitoring" in the book titled "Cloud Computing Systems and Applications in Healthcare" published by IGI Global book series, 2016.

PLACED STUDENTS 2016-17

B. Raghuvardhan Reddy(Tech Mahindra)

Ch. Krupa (GE Digital)

Ch. Satvik (GE Digital)

C. Dheeraj (Cyient)

Firdous Fathima (GE Digital)

G. Shilpa Reddy (HPE)

Gayathri Vishwanath (HPE)

I. Meghana (virtusa POLARIS)

J. Maneesha (HPE)

R. Ravali (HPE)

S. Lahari (Tech Mahindra)

J. Sai Krishna Praneeth (Tech Mahindra)

M. Rahul (CtrlS)

K. Rashmi (Tech Mahindra, HPE)

K. Sai Akshitha (HPE)

D. Mohan (Cyient)

K. Phani Teja (Ebutor)

N. Naveen Kumar (GGK)

V. Sai Ram (Cyient)

V. Uma Maheshwar Rao (virtusa POLARIS)

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