SRM UNIVERSITY
(Under section 3 of UGC Act 1956)

SRM UNIVERSITY, Vadapalani Campus
Faculty of Engineering & Technology
Department of Computer Science & Engineering

ACE
ASSOCIATION OF COMPUTER SCIENCE ENGINEERS

#include<newsletter.h>

FROM THE DEAN'S DESK

I congratulate the Department of CSE for taking the initiative to bring out this Deparment newsletter #include<newsletter.h> in a fashionable manner. I hope this newsletter will provide the platform and opportunity to all the students and staff members of CSE to share and update the information on recent developments taking place in the field of computer science and IT. I wish all the best for bringing out many volumes successfully.

FROM THE HOD'S DESK

I am very happy that our CSE department is releasing a newsletter as a fore runner of the department activities for this semester.

It is of upmost importance that students know things apart from the fundamentals in all fields to help them in their future. This newsletter in general will help the faculty and students to learn the latest developments. It will surely be of help to the students to advance their skills set.

EDITORIAL BOARD

> EDITORIAL LEAD
  Ms.B.Padhmavathi

> FACULTY CO-ORDINATOR
  Mrs.Madhumathi Rajesh

> EDITORS
  Aninthan
  Varsha Lakshman

> DESIGNERS
  Nagaraja Srinivasan
  Muthuramakrishnan V

. . . .

EVENTS

>Workshop on "Enterpreneur Orientation Programme" by NSIC

. . . .

PLACEMENT NEWS

Upcoming drives

> Hitachi Consulting

> U2opia Mobile Pvt. Ltd

> Thermo Fisher

> Temenos

>Verizon

>Tata Communications

. . . .

FOR MORE DEPATEMENT RELATED NEWS AND ARTICLES, VISIT www.tofsis.com

Workshop on GIT

Our department organized a workshop on GIT, a Version control system on the 22nd of August 2014. It was presided by Mr. Jeyanthan from CollabNet Technologies Pvt. Ltd. The day begun at 10 am and was initiated by The Dean and the Head of our Department, with a very innovative e-kuthu- vilakku and e-banner that was designed by our students. Mr. Jeyanthan gave an inspirational talk about why the workshop is going to change the way they develop a software and more importantly, on the right attitude that students should have to reach great heights in life. During the course of the day, students were taught the basics of GitHub and Version Control.

Git, a very necessary tool in the software development life cycle, is a software that is used for version control. The students had hands on learning of version control using the "Git Bash" application, A version control software is one that tracks different changes done by various contributors of an opensource or private development software. It Provides details on the different changes done to the code, that is hosted on a remote server. The changes can be reverted or pushed into the software after the original developer or the owner reviews it. Version control is extensively used in almost all software development and this gave the students some nice iindustrial exposure and helped them to understand the process of software development .
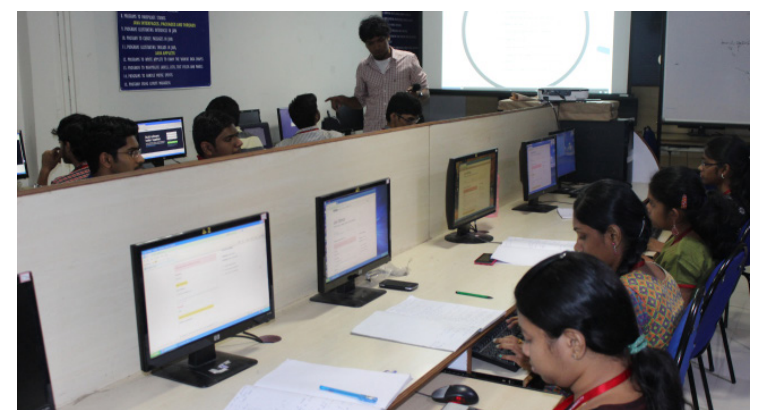
Learning is fun at IV

The third year students of SRM University, Vadapalani campus, went on an Industrial visit to Bangalore and Mysore from 17 September 2014, to 21 September 2014.
During the visit, the students got the opportunity to visit two companies, mPower Technology solutions, Bangalore and BitsBerry, Mysore.
On day 1, the students were addressed by representatives of mPower technology, in their offices in Bangalore about LifeRay. The representative then talked about LifeRay, the open source portal creation tool, mentioning vagain, its importance and specifying repeatedly how it is right now a niche in the market and how this niche can be cleverly used by the students for their benefits. He also made comparisons between different qualifications within the IT sector across time to support his point. He then ended the session by referring the students to some
On day 3, the students, in Mysore, were taken to the BitsBerry offices. Here, they were addressed by the representatives on SaaS. He told the students about its advantages and how it can be helpful for the students by making management and maintenance of software easier, should they learn how to use it.
On the whole, the students felt that they had learned something from their visit and can't be more psyched to put all the information to good use.

Placement-Review and a Look ahead

As an aspiring engineer, one of the important things that we seek from a University is the placement drive that is being offered. Career, future, package, job description, resume, HR interview, code challenge - these are some of the few words that ring in our hears when we enter our fourth year. SRM University's placement department is well structured to take care of the aspirations of the students in tune with the dynamic industry expectations and the curriculum. Over 200 top companies, both from India and abroad, visit SRM campuses to make offers to over 4,000 students - both undergraduate and postgraduate, every year.

SRM University, in collaboration with VistaMind Institute provides rigorous training to the students in order to get them ready for the Interview procedures. Quants, Logical reasoning, Data Interpretation, Reading Comprehension, Grammar, Vocabulary, Group Discussion, Mock interviews are few of the activities that a student dreads but are those that would help him during placements.

This year, as of October 2014, about 30 different companies have come and most of the students have been placed from the CSE department across various positions ranging from Software Developer, to Data Scientist. The interview process takes place at the Katankalathur campus.

"The process tested my coding skills and my knowledge in data structures and algorithms, as I had listed that as my interests." Says Abdud 'Coder' Dayan Adeeb, who is placed at Indix, which happened to be the first company to come to the university. They asked me to give the algorithm and sometimes the code for a problem they stated. It required me to be creative and innovative as the problem was not straight forward, it was something I had never heard before in my life"

Aninthan, placed in MuSigma Business Solutions Pvt Ltd, says "It was tiring process that lasted from 9:00 a.m. to 3:00 a.m. on day 2. You need to hold your nerves and get yourself over the line." Every interview is going to be a multilayer-ed stretching over a day or two, consisting of atleast 3 rounds at the minimum. Patience is virtue and that is the mantra during placement times. Abhijitha Babu, who is placed at Mu Sigma too, says "They don't expect you to say a definitive answer during the interviews as most of the cases, there are no definitive answers. The interviewer is looking for how creative and different you are while answering."

"Aptitude would be a breeze if you concentrate during the PD and VistaMind classes. It will not be a problem as long as you dont get nervous. Read the instructions as there might be negative marking in the aptitude round."Says Varsha, who is placed at Fidelity Investments as Quality Assurance Engineer along with Anupama Easwar who adds, "During interviews that hire you for non Technical positions, confidence and communication matters. You need to show willingness to learn."

Abhisek Nair, placed at Payoda as a Software Developer says "Be confident about the projects and internships that you have undertaken. Questions in interview rounds will mostly be based on your resume and you must be strong in it."

SK Vignesh, Aparajitha and Madhu G, placed at Aricent Technologies as Software Developer emphasise on the importance of being technically sound. Madhu says "They asked us questions from our areas of interest mainly. But it was not simple." Antony Savio and Tanima Mahadevan, placed at Caterpillar Inc talk about their Group Discussion round, where if you did not contribute as per their expectations, you will be eliminated.

With many more companies to come, the Department of Computer Science and Engineering is looking forward to see every single person in the batch with a job offer in their hands.

This Is the list of 62 students who got Placed as of now:

Student Name	Company(s)	Package	Student Name	Company(s)	Package
Mohamed Sadique	Wipro/CTS	3.25l PA	Utkarsh Singh	CTS	3.25l PA
Abdud Dayan Adeeb	Indix Technologies	7.2l PA	Abhijitha Babu	Mu Sigma	6l PA
Srikanth Natarajan	Wipro/CTS/Infosys	3.25l PA	Rakavee A	Wipro/CTS	3.25l PA
Keerthana	Wipro/CTS	3.25l PA	Rishi Sankineni	CTS	3.25l PA
Adithya Ganapathy	Wipro/CTS	3.25l PA	Vasanth Pranavan	CTS/Infosys	3.25l PA
S.K.Vignesh	Aricent Technologies	3.5l PA	Nandana A	Wipro/CTS	3.25l PA
Krithika Ramaswamy	Wipro/CTS/Infosys	3.25l PA	Aparajita	Aricent Technologies	3.5l PA
Chandra Shekar Krishna	Wipro/CTS	3.25l PA	Vishrut Sharma	Wipro/CTS	3.25l PA
Dawn Elizabeth	Wipro/CTS/Infosys	3.25l PA	Anupama Easwar	Fidelity Invesments	5.28l PA
Nagesh Rao	Wipro/CTS	3.25l PA	Damini Ojha	CTS	3.25l PA
Aninthan	Mu Sigma	6l PA	Vishal AV	CTS	3.25l PA
Aswani Prabhoo	Wipro/CTS/Infosys	3.25l PA	Animesh Mrinal	CTS	3.25l PA
Vaishnavi R	Wipro/CTS	3.25l PA	Rounak Agrawal	Wipro/CTS	3.25l PA
Nagaraja Srinivasan	Wipro/Infosys	3.25l PA	Milan Kumar	CTS/Infosys	3.25l PA
Manjusha VRK	Wipro/CTS	3.25l PA	Priyanka JK	CTS	3.25l PA
Ankur Sinha	Wipro/CTS/Infosys	3.25l PA	Saksham Sood	Works Application	38l PA
Sukanya Sunder	Wipro/CTS	3.25l PA	Avanthika U	Wipro/CTS	3.25l PA
D.V. Krishna	CTS	3.25l PA	Shivali Trikha	Wipro/CTS	3.25l PA
Arthi Akilandesvari	Wipro/CTS	3.25l PA	Neelayadakshi C	Wipro/CTS	3.25l PA
Mahalakshme	CTS	3.25l PA	Sai Sandeep CV	Wipro	3.25l PA
Anshul Gupta	CTS	3.25l PA	Logesshwar B	Wipro/Infosys	3.25l PA
Varsha Lakshman	Fidelity Invesments	5.28l PA	Abhishek Nair	Payoda	3.28l PA
RajaKumaran	CTS	3.25l PA	M Santhosh Kumar	Wipro	3.25l PA
Antony Savio	Caterpillar	5.28l PA	Mounika P	Wipro	3.25l PA
Shivanuja	Wipro/CTS	3.25l PA	Priyanka S	Wipro	3.25l PA
Madhu G	Aricent Technologies	3.5l PA	Sanjana N	Wipro	3.25l PA
Tanima	Caterpillar	5.28l PA	Shrish B	Wipro/Infosys	3.25l PA
Anju Malik	CTS/Infosys	3.25l PA	Sagar S	Infosys	3.25l PA
Manan Surti	CTS	3.25l PA	Sangita KS	Infosys	3.25l PA
Sai Krishna Reddy	Capgemini	3.05l PA	Pranit Kumar Pandey	Capgemini	3.05l PA
Manas Srivatsav	Capgemini	3.05l PA	Sudhrashnam CM	Capgemini	3.05l PA

Lecture on Sockets

Every bit of information shared contributes a great deal in the progress of our vast ocean of knowledge. The Computer Science Department takes pride in organizing the first guest lecture of this semester which was graced by the august presence of Mr. J. Santhanakrishnan, a retired DGM of BSNL telecommunications. He presented a detailed explanation on the interaction between layers in the OSI model and the basic concepts of socket programming.

He also discussed the issues faced while assigning protocols for both wired and wireless communication. The students got in depth knowledge on connection-oriented and connectionless service models. It was a privilege for the students to have an interactive session on such a topic which plays an important role in their college curriculum.

More importantly, the information was shared by Mr. Santhanakrishnan who is an expert in the networking field. On behalf of our department, we would like to extend our gratitude for exposing us to the wide world of networking.

-Srividya Ramaswamy
CSE-A 3rd Year

Konnichiwa Japan

I was very much lucky to choose Japanese as my foreign language which got me an opportunity to go to Japan, the land of the rising sun. After a series of interviews and tests I was selected for a Japanese govt sponsored trip to Japan along with 7 other fellow SRMites.

We landed in the land of rising sun at Nippon. The main objective of the trip was to learn Japanese culture and heritage while also learning about their development in Science and Technology. We also had the chance to stay at the homes of Mr. Choji and Mr. Kazunobu Yanagi at the Japanese village of Kurugawa. The shrines of Asakusa, Kushida and The Robo Exhibition at Robo Square, Fukuoka were some of the highlights of the visit. We had a very nice opportunity to know about the education system of Japan at Seinan Gakuin University.

Window shopping, pleasant scenery of the countryside, high tech artificially developed land structures with multi storey buildings and their food, or the vegetarian food I could lay my hands on, made our visit to Japan memorable forever.

-S.K.Vignesh
CSE-A 4th year

Workshop on Cisco Routers

The III - CSE Students attended a workshop on 'Networking and Cisco Products' at National Small Scale Industries ltd-NSIC on the Cisco Certified network associate exam After the brief session, all the Cisco products – routers and available ports were discussed in detail, where the students were made aware of all the available models introduced by Cisco. The students attented two practical sessions to get hands on experience in networking. The first practical session was on 'configuring routers'. Students were introduced to IOS of the router and taught to use console cable and Ethernet cable to configure and connect multiple routers and computers and to 'flash' new changes in OS to the router.

The second session dealt with using crimpers and connecting various devices using 'straight through' and 'cross-over' cables. The color coding standards established by IEEE were taught and participants were given the end connector RJ-45 to connect the wire to computer using crimpers. The workshop concluded with a short instruction on the basic paraphernalia for CCNA exam and the topics involved in it.

Achievements

> Pushpendra Tiwari and Ganapathi K,second year students bagged second place in Cura Biology Quiz in Aarush'14 and won cash prize worth 2500/-

> Pushpendra Tiwari and Ganapathi K,second year students bagged second place in Google Doodle Quiz in Reflet ionZ organized by the MBA Department

> Nivedita and Subathra, second year students won the first prize in Nail Paint in ReflectionZ organized by the MBA Department

> Raghav Srinivas, final year student won the first prize in T2T event in ReflectionZ organized by the MBA Department

> Sangita and Sai Navya came First Runners Up in State Inter University Tournament Tamil Nadu Lawn Tennis tounament held at TNSA Nungambakkam stadium

> Muthuramakrishnan V, third year student released an Open Source Library for Android, that backports a feature of Android L to Android 2.3 +

> Muthuramakrishnan V, Ashik V.C, Shyam R, third year students won the DroidCon National Android Hackathon conducted in Bangalore

>Abdud, Antony and Shiva Rao of 4th year Came 3rd in the State in Infosys Aspirations 2020

A Beginner's guide to Master's Abroad

I am Jyotheeswar Arvind M, alumni of SRM VDP Batch of 2010-2014. I had gone for the Semester Abroad Program at UC Davis during my 5th semester (Fall 2012) and going to the University of Toronto, Canada for my Master of Science in Applied Computing. In addition to U Toronto, I received admissions from Carnegie Mellon University, Cornell University, University of Southern California, University of Utah from the USA and RWTH Aachen, Germany. And here is the guide to masters abroad. When I started preparing myself for my Masters applications, preparations including shortlisting universities, doubts on SoP, Resume etc, I was truly lucky to be guided by Kushagra Tiwary, my senior from SRM VDP who's currently pursuing his MS at Colorado. Similarly, I wanted to share my knowledge on this subject with you so that you'll have a comprehensive guide, a base platform for your applications. In the following paragraph, I'll briefly describe the different steps/components that are essential for a successful Masters application. The information is mainly focused towards applications for Masters abroad, but can be used for M.Tech and MBA applications in India as well. THE STEPS IN APPLYING(IN ORDER):

* GRE Examination
* TOEFL Examination (can take IELTS instead)
* Shortlisting of Universities
* Reporting of GRE/TOEFL Scores
* Application for Transcripts from COE Office
* Drafting your Statement of Purpose (SoP)
* Multiple revisions and finalization of SoP
* Drafting of Letter of Recommendations (LoR)
* Starting the Online Application of the University
* Uploading Documents
* Requesting LoR from faculty online
* Submitting your Online Application
* Paying the associated fee
* Mailing hardcopy of Transcripts if required
* Following up of the LoR upload
* Start praying

The admission policy of each University varies over each intake year and there are NO set parameters on which they decide on the candidature of an applicant. It is imperative that the application be strong in all the components I've mentioned for it to be successful.

The GRE Exam can be taken up without attending classes. Self-prep, albeit in a focussed manner can go a long way towards achieving a good GRE score. I would recommend registering for the exams early as that deadline would normally force you into intensive preparation. There is no good GRE score. But if you're aiming for the cream of the universities, it is normally recommended to score 320+ and in particular, over 155 on the Quants part of it. The verbal part of the GRE does require intensive preparation however. So plan on starting it early.
Recommended books: Barron's GRE, ETS Guide to the GRE, online mock exams.

The TOEFL exam is pretty simple. The registration for the slots fill up quickly and I've had mine rescheduled twice because of 'technical issues'. So plan on booking it early. TOEFL has 4 sections: Reading, Listening, Speaking and Writing. It's pretty simple and all you need to have is a decent level of proficiency to crack it.
Recommended books: ETS Guide to the TOEFL

The shortlisting of the Universities is an extensive and tedious process. Based on your GRE scores, you should draw up a list of universities. You can always go by the USNews Grad School Rankings to decide on the level. DONOT GO BY OVERALL RANKING. Go by the Department ranking. If you are looking at a research course, then it is highly recommended for you to have prior research experience or published papers; especially if it is a highly ranked program. Industrial programs do not require research experience but internships (actual internships) are a must. Then decide on the university based on your area of interest and proceed accordingly. Report your GRE and TOEFL scores online to those shortlisted universities.

SoP, LoR and Resume: arguable the MOST important part of your application. Take care, put in loads of effort and be as honest as you can. The SoP should effectively convey your background, what you've done till date, why this program and university, what you will contribute. LoR – 3 usually. Draft one for each professor you are going to get it from. Do NOT have highly similar ones. There are loads of resources available online to aid you in writing and editing your SoP and LoR. Resume taught in college should suffice. Take as much help as possible discreetly when writing the SoP and LoRs. I received extensive support and advice from my seniors and friends and I would advise you doing the same.

The online application portals are pretty simple and similar. Scan and upload all your docs, request for LoR online and follow up with our professors and your industrial recommender, if any, to ensure they upload it on time. I am thankful that our Department were extremely supportive of my applying for Masters and gave me strong LoRs promptly.

Start praying. Sincerely. Even if you are an atheist.

Cyber Awarness

An awareness program was conducted for the first year students on 18th September about cyber safety. The function was graced by the august presence of the Head of the department, Computer science and Engineering - Ms. B. Padmavathi and Head of the department, Electronics and Communication Engineering - Ms. Gomathy and Student coordinator - Ms. Padma Rao. Tanima Mahadevan and Varsha Lakshman, two final year students from our department presented their thoughts on cyber crimes like stalking and bullying and how it affects the girl population in our society. The program kicked off with a short video clip on cyberbullying and ways to prevent it. The domination of Facebook in the cybercrime world was highlighted with exact facts and figures of how many people suffer in various age groups due to cybercrimes. Following this, there was another presentation "Connect to Inspire", that highlighted the lives and experiences of various woman achievers like M.S.Subbu-lakshmi, Kalpana Chawla and Mary Kom, who beat the odds to reach great heights in their lives. Dr. Jayashree from the MBA department also spoke about keeping up our moral values and the role that it plays in helping us achieve our dreams The session was very informative and very helpful , was the response by a lot of girls who attented the Programme

The Internet of Things

It's big and you need to know it. The Internet of Things can be portrayed as a scenario in which everything you can think of is connected to the internet. Things such as objects, people and animals. Everyone or everything is going to have a unique address such as an IP address that is going to interact with the internet without humans having any direct interaction with computers. The "Things" in the Internet of Things can be a Smart appliance in your home such as a coffee machine which has a sensor that recognizes when the coffee powder is about to get over and notifies the supermarket where you usually buy your coffee powder and the supermarket sends you a notification to your phone saying that you are two days away from running out of coffee powder. And in-turn this data is sent to the coffee powder manufacturer and the dealer showing the increase and decrease in demand for his coffee powder and show when this man would be buying the coffee powder again and how much in which month and accordingly decide and start the early production of it. By 2020, about 30 billion devices are going to be connected to the internet which is probably everything that you are most probably going to use every single day. The current IPv4 can give only 4.3 billion unique address which is definitively not enough for even a third of amount what is required. The new IPv6 can provide a huge number of unique addresses such that every atom in this planet can have its own IP address (Just kidding). It can give about 2^{128} connections which is about 340282366920938463 463374607431768211456 addressed (That's Huge, the previous line starts to make a little sense doesn't it). The research on the Internet of Things started around 1999. But the first device connected to the internet was a Coke machine back in 1980 at the Carnegie Mellon University. The programmers would connect to the machine over the Internet, check the status of the machine and determine whether or not there would be a cold drink awaiting them and should they decide to make the trip down to the machine. About half of the information on the internet is fed by humans and that is through typing, uploading photos, pressing the record button to record videos and audio, scanning barcodes and various other forms of content that I currently can't think of. But lately, people have become lazy, they pay less attention and have very little time to do everything they want to. So now it's these devices and sensors that are going to do the collecting and uploading for us. All this harnessed data can be used for various purposes in various public and private sectors. This data can be manipulated and analysed to check the market needs and trends. Companies can use this data to test run a product in a virtual market designed by the computer using the data and see whether it would succeed or not. It can also be used in Industries like healthcare where the medical reports can contain the daily food habits of a patient through this data and in technologies that use Autosuggestions to tailor every detail to a specific person according to his views and needs.

This is advantageous in a lot of way if regulated properly for the Private sector, public sector and the people. The private compa- nies, can now reduce the blind risk they take in creating new services and products. In the public sector, the government can get information on your medical care, bills and tax records .For the regular person, it saves a lot of time and energy for him/her as these devices and sensors collect all the data at the same time when the person is doing something else that's a lot more fun than writing down his next grocery list or later knowing that his car is out of fuel (Never saw that one coming).

Teja Talluri
II Year CSE-A

Android in Cars

Over years, we did see the small garage startup company called android becoming the global leader in mobile smart OS industry with feature rich and revolutionary products. When Google bought it, little did it know that it had brought a new world never seen before. Now after the last I/O where we saw some fascinating announcements like the Android L, it had even announced android for auto's and TV's. Yes, by the end of this year we will see smarter cars and maybe other vehicles too. So what will it do? You can very well know it in detail from google itself but for now all we know that driving is going to become safe and fun. They say, cars will be powered with the smart GPS system with integrated G-maps to make travelling easier. Google would be tracking our position to give a clear understanding of traffic in and around us, tracing our route to improve our travel, monitor our speed and steering to improve the way we drive. Many more can be accessed using voice control and Google Now's "Ok Google" feature just to make it even safer. For now all we know now is that few mighty auto giants are vigorously testing those nearly road ready cars for our safety and the first car will be launched by the end of this year. But for a second did you ever wonder why google planned to take such a mighty leap into the un-imaginable auto industry? Well the answer may sound simple but all of us need to admit the fact that at least there is one company that thinks about people and their needs rather than its rivalry whose got Google on its #1-Blacklist but remains lost and only thinks about its falling market, unwanted pride and in-company politics.

Karteek Rakshit
II CSE A

Brilliant Billion-Flipkart

Everyone knows the recent Flipkart's Big Billion Day sale on Oct 6th, 2014 as an equivalent to the Black Friday Sale in the USA. Pen Drive for 1 rupee! 1 TB harddisk for 600 rupees! Saying people were excited would be an understatement.

But when the actual day arrived, the agony and exasperation showed by the customers of the biggest e-commerce website in the country were not subtle.

All the products were "Sold Out" without any signs of it even being available in the first place. The site did offer discounts varying from 30-90 percent, and while many came out getting really cool apparels for cheap prices, the majority of the country were left in a turmoil.

It was also fun seeing its direct competitors Snapdeal and Amazon.in taking a dig at Flipkart. Snapdeal came up with a newspaper article on the day of the sale saying "For others it is a big day, for us today is no different".

It wasn't all happy clicking as several complained that the Flipkart site crashed within hours of the sake being launched, while the orders of a few were cancelled. A popular article on the internet shows how Flipkart manipulated all its products prices as a build up for the sale.As could be seen with examples, prices were raised substantially for the products and then brought down to effectively nullify each other. While such shocking revelations were brought to the front, it is not fair to say that the sale was a farce as it is being called. The largest e-tailer in the country announced a 100 million dollar revenue in just ten hours of the sale being on. And in the end, thats probably what matters.

EBOLA Virus Disease Discovery & Spread control using Mobile Phone data ???

This article is to trigger your brains in designing a Disease discovery & Spread Control Model for EBOLA Virus – that could have an acronym as - DDSCM-EBOLA!!! Using Mobile Phone data. This poses a challenging research topic combining Data Mining & Big Data Analysis & Processing. Already such models were tried for other epidemics like Malaria etc. Students who are fascinated and interested in Mobile Apps should stretch further and think differently for the cause of Society and its reforms. This is an attempt to throw some light on the ongoing projects in this context.

Ebola virus disease (EVD), Ebola hemorrhagic fever (EHF), or simply Ebola is a disease of humans and other primates caused by an Ebola virus. Symptoms start two days to three weeks after contracting the virus, with a fever, sore throat, muscle pain and headaches. Typically, vomiting, diarrhea and rash follow, along with decreased functioning of the liver and kidneys. Around this time, affected people may begin to bleed both within the body and externally. The virus may be acquired upon contact with blood or bodily fluids of an infected animal. Spreading through the air has not been documented in the natural environment. Fruit bats are believed to be a carrier and may spread the virus without being affected. Once human infection occurs, the disease may spread between people, as well. Prevention includes decreasing the spread of disease from infected animals to humans. This may be done by checking such animals for infection and killing and properly disposing of the bodies if the disease is discovered. Properly cooking meat and wearing protective clothing when handling meat may also be helpful, as are wearing protective clothing and washing hands when around a person with the disease. Samples of bodily fluids and tissues from people with the disease should be handled with special caution.

No specific treatment for the disease is yet available. Efforts to help those who are infected are supportive and include giving Eitheroral rehydration therapy or intravenous fluids. The disease has a high risk of death, killing between 50% and 90% of those infected with the virus. EVD was first identified in Sudan (now South Sudan) and the Democratic Republic of the Congo. The disease typically occurs in outbreaks in tropical regions of sub-Saharan Africa. The largest outbreak to date is the ongoing 2014 West African Ebola outbreak, which is affecting Guinea, Sierra Leone, Liberia and Nigeria. As of 26 August 2014, 3,069 suspected cases resulting in the deaths of 1,552 have been reported. Efforts are under way to develop a vaccine; however, none yet exists.

A Tentative Model to discover & control the spread of the Virus is as follows. A West African mobile carrier has given researchers access to data gleaned from cell phones in Senegal, providing a window into regional population movements that could help predict the spread of Ebola. The current outbreak is so far known to have killed at least 1,350 people, mainly in Liberia, Guinea, and Sierra Leone. Mobility data from an African mobile-phone carrier could help researchers recommend where to focus health-care efforts. The model of West African regional transportation patterns was built using, among other sources, mobile-phone data for Senegal, released by the mobile carrier of Orange Telecom. The model created using the mobile data is not meant to lead to travel restrictions, but rather to offer clues about where to focus preventive measures and health care. Indeed, efforts to restrict people's movements, such as Senegal's decision to close its border with Guinea, remain extremely controversial.

Flow minder is a Software firm, which builds Models of population movements using cell-phone data and other sources is a Swedish non profitable agency founded by Dr.Linus Bengtsson, a medical practioner. They became the official partners of Orange Telecom and made an exceptional authorization in support of Ebola Control efforts. They claimed that if there are outbreaks in other countries, this analysis can tell what places to link
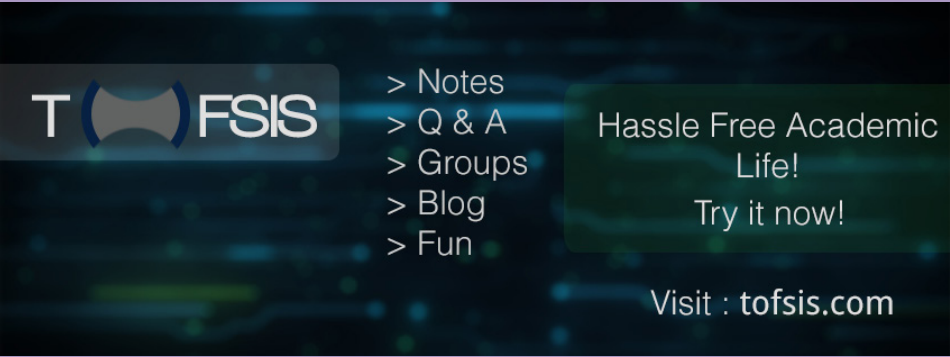
The data from Senegal was gathered in 2013 from 150,000 phones before being anonymized and aggregated. This information had already been given to a number of researchers as part of a Data Analysis Challenge planned for 2015, and the carrier chose to authorize its release to Flow minder as well to help meet the Ebola crisis. The new model helped Flow minder build a picture of the overall travel patterns of people across West Africa. In addition to using data from Senegal, researchers used an earlier data set from Ivory Coast, which Orange had released two years ago and this includes data about population movements from more conventional sources, including surveys. Separately, Health Map, a team based at Boston Children's Hospital, has produced an animation of the epidemic's spread since March, based on records of when and where people died of the disease.

Bengtsson cautions that the model is essentially a first draft, and that it's based on historical movements, so it does not take into account how people may have changed their behavior in response to the recent crisis. Ideally, he adds, it would include real-time data. But "in countries that already have epidemics," he says, "this is the best estimate we can do of what mobility will look like. This can give the sense of the radius people tend to travel around. Ebola is transmissible via bodily fluids during an incubation period of between two and 21 days, during which victims may not know they are infected. That makes it particularly important to know where people are going and where they've been.

Thus Mobile phones—which are ubiquitous even in poor countries—can play a key role. All cell phones "ping" nearby towers with a unique ID number to announce their presence. In this way, mobile carriers amass huge databases containing fine-grained information on population movements and social patterns.

B.Padhmavathi
HOD/CSE

TOFSIS v2.0

TOFSIS
> Notes
> Q & A
> Groups
> Blog
> Fun

Hassle Free Academic Life!
Try it now!

Visit : tofsis.com

TOFSIS stands for The Online Faculty Student Interaction System. As the name goes, TOFSIS aims at building a synergetic relationship between the teachers and students. It was started by myself, Ankur Sinha and my friend Srikanth Natarajan during our second year, with all the assistance provided by our class advisor, Mrs. Madhumathi Rajesh. After having got the approval from the Dean and the HOD of CSE department, TOFSIS went live on 6th February, 2013. TOFSIS is funded by our campus. Initially, TOFSIS only provided a platform to share academic resources online. All the PPTs, DOCs, PDFs, etc. were uploaded by the teachers and students downloaded it whenever needed. It was a run-away hit amongst the batch of 2015. The site crashed due to excessive traffic and downloads during the Model Exam in 2013. To overcome such problems, the department then gave us permission to upgrade our hosting plans. TOFSIS underwent a complete renovation before the start of odd semester in 2014. The new TOFSIS is made using Content Management System for user-friendliness. The new file sharing is now done via Dropbox to save bandwidth and prevent any sort of over- loading on the site. Students are redirected to the Dropbox link to find all the files. Everything from lectures, presentations, questions papers, e-books related to our courses, can be found here. If they are not, one can always upload and share it with others. An alumni network has built to connect all the students within the campus and across all departments. This network has groups for various purposes which you can join to find people with mutual interest. For example, if you are interested in Robotics, and you do not know whom to approach or you wish to learn about the same from experienced people, you can always go to TOFSIS, join the Robotics group and get to interact with people of your interest, build cool projects with them, and guide others. A question and answer forum similar to Stack Overflow has been added for you to post all your doubts and get it clarified. You will know the various ways you can solve your doubts with the help of teachers, your friends and your seniors. You could also post answers to help others out. Another very important feature of TOFSIS is the blogging system. If you feel you or your team has achieved something and you want the campus to know, post it on TOFSIS and make everyone know about it. It can be about any competition, or any internship experience, how your placement or interview with a company went, a new technology, a new project of yours, or anything. You can find vital information about placements, higher studies and reviews about various things here. It has been nearly 1.5 years since TOFSIS went live, and we now wish to expand the site to the other departments as well. The department of CSE has solely produced around 20,000 visits and 80,000 page views during this period. Our immediate juniors Muthu, Ashik and Ganesh from CSE-A, III year, are working with us on the backend; they know administer the site. There are still a few more open positions for TOFSIS and we are looking forward to work with more students; check out the website for more details. My friend Srikanth and I sincerely thank the Dean, our HOD, our class advisor, and everyone from the department for making this happen. We would like all the students to signup in TOFSIS, you can even use your Facebook or Google account to Signup.

Ankur Sinha
Srikanth Natarajan
IV Year CSE-A

• • • • • • • • • •