



HI ATHARVA III

21st Edition August 2018

EDITOR'S CORNER

Divya Pichumani

The month of August witnessed a lot of activities at SCIT. The college hosted the "Indepen dence Cup 2K18", organised ISR activities for the Kerala flood relief and also hosted a series of Guest Lectures.

There was active participation from the seniors and juniors in the Independence Cup. Rivalries turned to friendship at the end of the Sports events.

Independence Day was also cel ebrated with patriotism at SCIT. A number of guest lectures were organised in various subjects like Information Security, Data Science, Agile, FRPs, etc.

The students and faculty mem bers came together to contribute for the Kerala flood relief. They also actively participated in col lecting clothes, rations and other essentials for the affected.

The month of August instilled a sense of oneness in the hearts of SCITians. Web and Media Com mittee is proud to present the 21 st Edition of Atharva to all its readers. Happy reading!

What's Inside..

- Guest Lectures
- · In the campus
- Faculty Blog
- Star Alumni
- · Team WnM

FUJITSU INTERNSHIP

Manproet Kaur



"Tell me and I forget. Teach me and I remember. Involve me and I learn." This outlook unknowingly demands practical learning and Internship is something that can fulfil this demand of practical learning. Few students of SCIT went to Fujitsu for their internship programme this year. They enumerated their experience and shared insights of Japan's work culture. One of the interns, Shruti Singh elucidated that her internship was fun and the kindness of people helped her a lot. Her internship was in Service Management 3. The

second intern, Bithal Agarwal also had a good experience in Japan. His work involved automating vulnerability scanning process which was carried out manually. He found Japanese people very welcoming when presented with new ideas.

Priyanshu Upadhyay, the third intern, is a Data Science student. This internship acted as a platform for him to practically apply what he has learnt so far. He elucidated different methods of image analysis that he learnt during his internship. Learning new things and working out of comfort zone have helped him a lot in developing him overail. He suggested that one should definitely opt of internship outside India if they wanted to realize their true potential and worth.

To encapsulate, Internship is not just three months tenure; but a ticket for landing up in one's dream company. This internship was a lucrative journey for all the interns and taught them various things all together, significantly the potential they hold.

SCIT FOR KERALA FLOODS

Haritha N

"Sharing is Caring". In par with this, the stu dents of Symbiosis Centre for Information Tech nology came forward to contribute to the recent Kerala floods, that left thousands homeless and hundreds killed. The ISR committee of SCIT along with the students and faculty members



joined hands together to raise funds for the Kerala floods. From the amount that was collected, the students bought the basic survival goods and hygiene products. Symbiosis Centre for Health Care (SCHC), donated free medicines to the victims. A group of seven students coordinated the entire process where the money was collected; goods were purchased and was sent to Kerala using trucks.

As it is rightly said, 'A small change can bring in a huge difference', The SCIT family, posed as a standalone example to this. Once again it proved the significance and the power of unity, by uniting for a noble cause to make a big difference. Dr. Dhanya Pramod, Director of SCIT, handed over the cheque to Mr.ShashiTharoor, Member of Parliment, as a part of CM Relief Fund. The spirit of sharing and the joy of giving are rightly inculcated in the mind of every student in this prestigious institution.

IN THE CAMPUS

ISACA KNOWLEDGE SHARING AND ISO 27001

Diwa Pichumani and Dhruti Luhar

access to private information.



ISACA Student Group of SCIT organised a Knowledge session on 4th August, 2018. Mr. Pushikar Dhole, Mr. Aannaaand Deshpande, Mr. Prasad Wadwekar and Mr. Praveen from ISACA Pune Chapter had gathered to address the crowd. Mr. Pushkar Dhole started the session with a beautiful example of how dangerous it was to share an individual's name and phone number in this changing world. He explained as to how people gain The next speaker was Mr.Deshapande who spoke about the growing need for data classification. He highlighted as to how data had become the crux of any and every industry today and why it was essential to classify the same to grow business. The

industry today and why it was essential to classify the same to grow business. The takeaway from the session was the importance of being a student no matter how old we grow.

The speaker for the second half of the day was Mr. Vijay Upadhyay; who is working as a Manager at HSBC Bank. He has completed CISA, CCSK, CISM and CISSP Certifications and has over 11 years of experience in Information Security field. He is an alumnus of Symbiosis Centre for Information Technology.

He spoke at length about ISO 27001 Standards and how it is implemented in the industry. He also spoke about the time needed to implement the standard. At the end of the session, he said that Standards must be used in particular layout, their controls must be fully used and objectives should be acquired for obtaining better results.



INTERACTION ON LASTEST INFORMATION SECURITY TRENDS

Manpreet Kaur



Education without industrial insights is of no worth these days. In the current scenario, companies are seeking candidates who have enough knowledge and are acquainted with know-how of their respective domains.

Mr. N Subramanian, Executive Director at KPMG was invited to share a glimpse of Information Security domain. Professor Shaji Joseph and his Guest Lecture team released a newsletter titled "SCIT Weekly" which contains the latest happenings in the IT industry. After that, the session was taken over by the speaker. The session revolved around Digital Disruption, one of the crucial changes which affect an organisation as a whole. Mr. N Subramanian also shared the benefits that an organization can derive from the evolution of technology. He explained that the evolving technology will increase the productivity, enhance the utilization of asset and reduces the cost for companies. A healthy discussion regarding GDPR, it's applicability in India and various terminologies of information security were also done. He also mentioned regarding the 'KPMG Cyber Crime Report 2017 and four Golden Rules of Cyber security, and drew attention on the last one, that was, treating cyber risk as an opportunity to look dosely at one's business. Other than information security, the significance

of asking question was discussed. He emphasized on the importance of asking questions by quoting that "Be a fool for five minutes but not for the rest of your life."

Overall, it was brim-full session of knowledge which helped the students in getting latest industrial insights. The session was not only restricted to the domain but also touched various aspects which can help one to develop the overall personality. He ended the session with a quote which left deep impact on everyone's mind which was:

"If you are in rat race, even if you win, you are still a rat"

IN THE CAMPUS

INDEPENDENCE DAY AT SCIT

Dhruti Luhar



On 15 August, 1947, India awoke into independence once again. In fact, the country did not sleep. India's first Prime Minister Pt. Jawaharlal Nehru delivered his historic address and our countrymen geared up to keep our "Tryst with Destiny".

This 72nd Independence Day was celebrated with zeal and zest in Symbiosis Center for Information Technology. Each year, this day is celebrated as a tribute to the spirit of freedom and to the courage and sacrifices that countless men and women made. The day started with the strands of flag touching

the sky limit, clusters of balloons ready to fly high and our respected Tiranga primed to hoist proudly. All the mighty SCITians suited up to the mark, showing "Unity in Diversity" among themselves. All the faculty members, staff members and the domestic members showed their delight in the day by having their presence.

The celebration started with Dr. Dhanya Pramod, Director, Symbiosis Centre for Information Technology, welcoming the Chief Guest and the Guest of Honor, Immediately, flag was hoisted with the feeling of gratitude, feeling of respect towards sacrifices, remembering all Shaheeds and lightning their worth to praise work. The campus was humming with the beats of 'Jana Gana Mana'.

The programme continued with a speech by the Chief Guest of the day, Dr. Prathima Sheorey, Director SCMHRD who made the students aware about the addiction to technology among today's youth. All the students were startled with the bitter truth, but it's the destiny they chose it.

Furthermore, awards were distributed to all the hard working domestic workers to make their work worth appraisal. The celebration ended with the gifts and sweets distribution among the joyous children. And lastly, cluster of balloons were freed with the new hope of to take ourwish of total freedom in our country. All the students, faculties and the staff members werethen dispersed with the patriotic proud feeling in their heart to start their journey again with the great power and enthusiasm.

Jay Hind!

DATA SCIENCE AND ANALYTICS IN RETAIL/CPG INDUSTRY

Dhruti Luhar



On 14th August 2018, a guest lecture for Data Science and Data Analytics students was conducted by Mr. Sameer Kale. He is the Manager of Data Science and Analytics Energy, Utilities and Services in Infosys.

Data Science and Analytics in Retail and Consumer Packaged Goods Industries is not a buzzword, it has been residing in this field from the traditional era. But the practices involved in Data Science and Analytics are very different from the Modern era.

Today, the Advanced Real Time Analytics are in use. Firstly, while working in any industry we need to understand the customer's requirements and accordingly use appropriate methods of Data Mining. Mr. Kale spoke about the well-known methods in Data Mining; Machine Learning/Deep Learning.



Machine learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experiences without being explicitly programmed. It focuses on the development of computer programs that can access data and use it learn for themselves. He also emphasized about the latest trends in the field of Analytics, such as Machine Learning, Deep Learning, Computer Vision, IoT, Artificial Intelligence, Augmented Reality, etc. He also explained about the Data Science Life Cycle and tools used in it. The various steps involved in it include Data acquisition, Data preparation, Hypothesis and modelling, Evaluation and Interpretation, Deployment, Operations and Optimization. The commonly used tools are R, Python, Hadoop, SQL, etc.

He ended the session by making students aware about the various profiles and jobs in Data Science that are in demand currently. The knowledge gained in this session will help the students to make choices in the Data Science field in the upcoming years.

GUEST LECTURES

MACHINE LEARNING AND COMPUTER VISION ALGORITHMS

Daya Pichumani



Machine Learning and Artificial Intelligence are two terms that every person in the IT and non-IT industry is listening to these days. With the advent of Big Data and Data Analytics, a rapid growth in Machine learning and AI is observed. Symbiosis Centre for Information Technology organised a guest lecture on the topic "Machine Learning and Computer Vision Algorithms role in Artificial Intelligence" on 25th August, 2018. The esteemed speaker of the day was Dr. Ganesh Bokhare, a freelance consultant at iDL Vision – Vision, Learning, DSP and Embedded

Systems.

Dr. Bokhare started the session by explaining how computer vision algorithms are continuously used in businesses today. He explained this by saying that these algorithms form the base of Machine Learning and that is the reason why these algorithms are forerunners in terms of governing the way ML and AI are working. The students actively participated in the session by asking questions based on how these algorithms are used and the scope for their improvement in the future. He explained the significance of Machine Learning and Computer Vision algorithms in shaping the way businesses function in the current scenario. He also spoke about how Big Data, Internet of Things, Data Science and Data Analytics need a strong foundation in the form of algorithms to make it easier in terms of development and also time consumption. He gave insights on how the field of Machine Learning is bo

oming and also said that more and more organizations are eager to invest in this technol ogy because of the savings that can be done in terms of time, money and working personnel.

The session gave a brief look into the industry demands from a person willing to pursue a career in Machine Learning and Artificial Intelligence. The students look forward to more such sessions to enhance their skills and become better prepared to face the industry.



CAPITAL MARKET AWARENESS

Dhruti Luhar



A guest lecture was organized by SCIT regarding Capital Market Awareness on 31 st August, 2018. The speaker of the guest lecture was Mr. Sandeep Sahasrabudhe. He is the Chief Financial Planner at Moneywise Wealth Planners, Director at Worldwide Properties Pvt Ltd, Branch Head – FPA, Pune. His 13 years of work experience in financial planning and wealth management has made him a specialist in the following investment products – life insurance, equity and debt mutual funds, structured products, stocks, traditional investments and

general insurance. He started the session by giving insights about the total savings in India and its steady decline.

"It is not your salary that makes you rich, it is your spending habits"

He told that the expenses made by every citizen should be what are left from the income excluding all savings. He gave students the layman definition of Investment which is savingswhich are directed towards financial goals. These goals may be for short term, middle term and longterm. He shared lot of facts about the Bombay Stock Exchange and also mentioned that thepurpose of Stock Exchange is to encourage the companies to raise resources through public issues. This way buyers and sellers enter into transaction and make profit or loss.

Mr. Sahasrabudhe mentioned few points on why India is lacking participation in the Capital Market: lack of awareness, fear of risk and no guaranteed returns. He also advised that people should never invest in guaranteed return products.

He also told that people face loss in Stock Market because they invest in wrong stocks or invest at peak level of SENSEX, which is a trap. He also said that selecting a stock is analogous to choosing one's life partner.

Stock should have good track record of profitability and should possess brand image (Image of promoters). He also advised the students to do individual research fromall the quality aspects of stock and invest in SIP (Systematic Investment Plan). He ended the session by suffusing that one should have goal to achieve high money because money is the only means which can give happiness to current generation.

GUEST LECTURES

GUEST LECTURE ON DEVOPS

Manpreet Kaur



From phones to cars to medicines, every aspect of life has been touched by technology. If one can create technology, one also has the power to change the world. Technology is changing at an incredible pace and keeping up with such technology is a challenge in itself. Human resource is considered as one of the crucial assets by Information Technology industry these days. Keeping in mind the current scenario; SCIT is helping its students to become highly resourceful to meet the standards of the industry. The college is helping the students to be the best engineers with managerial

skills.

Recently, the Guest Lecture committee invited one of the known personalities in the field of Software Engineering to address the students. Mr.Uday Kumar (Certified AIPMM-Product management), currently working in Addreq, is known for his DevOps expertise in the industry. He shed light on DevOps and the contribution of the same in the industry.

Mr.Uday Kumar asked students to share their views on Artificial Intelligence and said that whether we like it or not, it is assured that it is coming into the picture. Product Failure topic was one of the topics which raised maximum questions in the session where he mentioned that 30-40 percentage is the failure rate of products in the industry and the main culprit behind that is Requirement Collection. He added that the main problem is that our focus is not on the problem but on the solution.

The second half was all about DevOps. Comparison of Agile and waterfall model helped the students understand the real picture of the Software industry. He drew attention of students on the reasons why DevOps has an edge over other methodologies wherein he mentioned about the value which is being added by DevOps in terms of Return on Investment, Net Profit and Quality. Different pillars (Integration, Collaboration and Communication) of DevOps on which it is standing and their relation with Culture, technolgy and product were also discussed.

Overall, the session was valuable. Students got acquainted with different Software Engineering methodologies and current market needs in terms of both development of the product and the problem that the product will solve. Active participation was shown by students and the same enthusiasm was carried throughout the session.

CONSULTING SOLUTIONS FOR RFPS

Vidhi Saxena



SCIT witnessed a knowledge session by the esteemed director of Symbiosis Centre for Alumni Engagement, Dr. Neelesh Khumbojkar on August 29th, 2018. Dr. Neelesh is the Competency Head for cloud practice at the giant, Tech Mahindra. Along with him, Mr. Anil Rahate, Senior Consulting Manager, Wipro Ltd., took the second half of the lecture.

Dr. Khumbojkar focused on the importance of adapting a proactive, rather than a reactive approach for a presales consultant. It's generally not clear who to involve in RFP response and no one has the clarity about who is paying for RFP in an organization. Dr. Neelesh gave a brief about SaaS, PaaS and IaaS cloud models. He stated that PaaSPlatform as a service) is something which provides the user with a runtime environment, whereas example of SaaS(Software as a Service) includes everything(infinite apps in android playstore) present on a smart phone.

Following this, Dr Khumbojker depicted 2018 as VUCA(Volatile, Uncertain, Complex and Agile). He concluded his lecture by giving the students insights about few exemplary real time cases. The cases were about the giants like Amazon, Hitachi and manufacturing cos.

Mr. Anil Rahate pointed out the digital aspect of a presales solution. He started with the statement- "Digital is about simplification". He added that the value lie at the intersection of thinking mindset, new ways of working and technology"

Another concept introduced in the session was about the "Three Amigos". The three amigos being- Tester, Developer and Product Engineer. The session ended on a thoughtful note regarding digital transition - "Digital transition is all about services, business model and aligning those services to your business."



FACULTY BLOG

IT BASED SECURITY ATTACKS AND FRAUD

Dr. Mandaar Pande



Blog 1: The new paradigm in Computing. This is a series of blogs that I will be writing for everyone to get a basic understanding of this immensely important research field which is

poised to become mainstream in a few years and significantly impact our daily lives.

All computers today including laptops, notebooks and even smart phones are termed as classical computers. All of these use ICs which are constructed from basic digital elements called transistors. In essence, transistors act as electronic switches and operate on electric current. When the switch is open, and no electricity is flowing, it represents a 0 bit. When the switch is closed, and electricity flows through the circuit, it represents a 1 bit. This is shown in Figure 1a below. Everything that today's computer is able to do, is done by operating on one or more bits at a time very quickly. At any time while the computer is running, it can be in one of 2^n possible states, where n is the total number of bits, ranging from 00..000..0 to 11..111..1.

At the most fundamental level, the physical

principles that govern nature, follow the laws of Quantum Mechanics. Quantum Mechanics is a fundamental theory in physics which describes nature at the smallest scales of atoms and subatomic particles. At these levels, particles behave in strange ways (very unlike our usual understanding of how objects behave in the normal "classical" world). Quantum computers are based on the principles of Quantum Mechanics.

Unlike classical computers which are based on bits, quantum computers are based on Qubits (Quantum bits). Qubits operate according to two key principles of quantum mechanics, namely superposition and entanglement. A qubit can be in state 0, state 1, or a mixture of 0 and 1 at the same time. This is known as superposition. This allows the quantum computer to simultaneously exist in exponentially many logical states. As shown in Figure 1b, before we measure its value, a gubit is in an indeterminate state due to superposition. Along with exploiting superpositioning, quantum computers also take advantage of another counterintuitive feature of quantum mechanics called entanglement. When individual qubits become entangled, they can no longer be described individually. They can only be described as part of the system as a whole.

Further, there is also a correlation between entangled particles even if they are separated by very large distances. Measuring one of the qubits immediately affects the other entangled particle. The innovation in quantum computing is in the way scientists have taken advantage of these two principles and enabled quantum computers to function in ways that allow them to take up and provide solutions for difficult problems that cannot be solved using today's computers.

In terms of processing of information, in a classical computer, at the fundamental level, bits are processed sequentially, which is similar to the way a person would solve a math problem by hand, one step at a time or one would write an algorithm which gives sequential steps for execution of some problem. In quantum computation, qubits are entangled together so changing the state of one qubit influences the state of others regardless of their physical distance (as mentioned earlier). The consequence of entanglement is that quantum computers have the ability to work on multiple solution options in parallel resulting in converging quickly to the right answer for a given problem. As a result, gubits working together to find the optimal solution are more efficient than certain classical approaches.

STAR ALUMNI

PRATYUSH MITTAL

Divya Pichumani



Star Alumni of August 2018 is Mr. Pratyush Mittal. He is currently working as a Business Analyst at ThoughtWorks.

He completed his MBA in IT Business Management from SCIT in the year 2014 and completed his Engineering from University of Rajasthan in the year 2009.

He is an experienced agile evangelist with an expertise in delivering distributed agile projects. He started his career as a Quality Analyst and then moved on to the role of a Business Analyst. His sincere dedication in the field of Requirement Management is attributed to his current successes as a Business Analyst.

Pratyush's promising career in the business analysis field adds glory to the success stories of SCIT's alumni.

TEAM WEB AND MEDIA

Faculty Mentors



Prof. Dr. Brijesh S. P.



Prof. Vidyavati Ramteke

Student Members



Alehil Nair Web Developer



Alan Pinto Social Media



Photographer



Ambika Singh Kelwa Amit Khandebharad Writer



Designer



Amol Waghmare Anandam Roychowdhury Photographer



Ankita Singh Designer



Atul K Video Editing



Bansari Pandya Designer



Bipin G Dhotre Photographer



Dhruti Luhar Writer



Divya Pichumani Writer



Elaine Fernandes Photographer



Gaurav Kandpal Designer



Ghanshyam Savaj Web Developer



Haritha N



Harshita Priya Social Media



Jay Bhimani Social Media



Madhumita Chatterjee Web Development



Manpreet Kaur



Mayur Sakpal



MD Sadaf Aqubal Social Media



Mohini Madhur Photographer



Mona Pounikar Web Development



Moutrishna Ray Designer



Nikhil Borse Web Development



Nimisha Singh Designer



Nipun Koichade Photographer



Pamika Singh



Piyus Ranjan Pradhan



Priya Das Web Development



Priyanshu Ranjan Photographer



Ragini Tahiliani Designer



Rajesh Munnahiri Photographer



Ria Chaudhari Social Media

Shrita Karmokar

Writer



Roshan Tawar Designer



Rupen Suryavanshi Web Development

Shubh Mehra

Social Media





Sarvagna Mahakali Satyajeet Malgaonkar Designer Video Editor





Soumya V Ganesh Vidhi Saxena Writer Writer

Shubhanjali Sharma Web Development



Srushti Mahabole Designer

