



Kristu Jayanti College

AUTONOMOUS Bengaluru
Reaccredited 'A' Grade by NAAC | Affiliated to Bangalore University

TECHNOBYTES

DEPARTMENT OF COMPUTER SCIENCE (PG) | MCA PROGRAMME

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CHIEF EDITOR : REV. FR. JOSEKUTTY P.D, PRINCIPAL | REV. FR. AUGUSTINE GEORGE, VICE PRINCIPAL | PROF. R.KUMAR, HOD

LAURELS

OVERALLS

- * St. Aloysius College, Mangalore
- * Jyoti Nivas College, Bangalore
- * Surana College, Bangalore

CURRENT EVENTS

Shells 2k18 , National Level Inter-Collegiate IT Fest, 1st and 2nd March 2018.

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II MCA

MR. ABIN JOSEPH

II MCA

Autonomous Vehicles-Boon or Bane?



Ms. Ramya Chandrasekaran

Senior Product Manager
Intel Corporation
San Francisco Bay Area

Imagine this-You wake up in the morning, get ready for work and get into your car.You don't drive the car-but you settle down with your laptop in the rear seat.

You answer an office call and clear your mailbox-while you car continues driving -weaving in and out of traffic. It is even smart enough to choose the less congested and fastest route to work.

You get to work and then send the car back to give a ride to your mom to the doctor.The car will drop her off at home and pick up your kids from school and take them home.

All this sounds like a science fiction movie plot-right?

Car companies like Tesla and technology companies like Apple are investing heavily in the Autonomous driving market today.The above scenario is not very far fetched.Our children could never need to know about drive-they will probably know driver-less cars as the norm.Just like smartphones are the norm today! What about safety and precautions though?

What are your kids are stranded in the middle of nowhere-because the car's computer crashed?

After all, computers aren't failing proof! Smartphones crash all the time.

There needs a push on two sides of the equation to make this new technology safe.

Safe development practices-Starting from big automobile companies to the smallest communication chip manufacturer, everyone wants a piece of the future.The new shiny object in the sky is Autonomous driving.We have to ensure that we enforce safe development practices for all parts of the process.For any new technology, there is a learning curve when the technology goes from a nascent stage to a mature /stable offering.For Autonomous driving, we have to ensure that the learning curves a short and meticulously safe.

Regulatory Bodies and Certification-Traditionally, Regulatory bodies are a little slow to catch up with technology.For Autonomous Driving, we cannot afford that. The other challenge is that each country has its own regulatory body.We have to ensure that regulatory bodies are stringent about safety-but don't curtail innovation.This is a very tough balance to strike.

In summary-the future is exciting.However, we must proceed with caution!

Vice Principal's Message



Fr. Augustine George
Vice Principal

Technological innovation is radically changing every aspects of life. very organization and business are feeling the impact of globalization, migration, technological and knowledge revolutions, and climate change issues. Innovation will bring added value and widen the employment base. Studies have confirmed that all businesses want to be more innovative. One survey identified that almost 90 per cent of businesses believe that innovation is a priority for them. It is found that importance of innovation is exponentially increasing, and increasing significantly. In the current day economic scenario, innovativeness has become a major factor in influencing strategic planning. Intelligent automation—the combination of artificial intelligence and automation— is already helping companies transcend conventional performance tradeoffs to achieve unprecedented levels of efficiency and quality. Applications range from the routine to the revolutionary: from collecting, analyzing, and making decisions about textual information to guiding autonomous vehicles and advanced robots. Automation is the use of technology to support a traditional model, whereas innovation enables ways of delivering knowledge and services that are simply not possible - or even imaginable - without technology. Innovation, the “creation of new knowledge that is applied to practical problems” (1),

is the most important driver of competitive success. This new age focus more on Innovation in everything, which can be applied with Imagination and Creation. The skills of Kristu Jayanti College Students are fine tuned to use their unique and novel ideas and innovate new things.

The Department of Computer Science (PG), Kristu Jayanti College aspire the students at intensifying this new way of learning experience among the students amalgamate both formal and informal education. Apart from the delivery of the curriculum through the novel teaching pedagogies, we involve them in social learning to augment and to sustain the technical skills of the students.

The ‘Technobytes’ the newsletter of the department brings to limelight activities and achievements for the departments. It captures the glimpses of all academic, curricular and co-curricular activities, initiatives and achievements. I wish this endeavor a great success and I take this opportunity to appreciate tireless efforts of every creative mind behind it.

Dean's Message

Dr. A.L. Calistus Jude - Dean, faculty of Sciences

Recent years have witnessed an upsurge of enthusiasm for computational science and developing applications. Thus, it is important for students acquiring higher education in information technology to identify and analyse today's complex software systems whose characteristics are not limited to a few application domains but are widespread. It is my great pleasure and honour to introduce this issue of “Technobytes”, the compilation of creative thoughts, innovative ideas and updates in information technology by the students and faculty members. This publication is

mainly aimed at enhancing knowledge and showcasing the dexterity of our students.

It also highlights the events and activities of the Post Graduate Department of Computer Science. I believe that this publication will be instrumental in amalgamating inventiveness of students, create an identity for the contributors and strengthen internal relationships and knowledge.



MCA Programme at a Glance

Prof. R. Kumar
Head, Dept. of Computer Science (PG)



The Department Computer Science –PG (MCA) of Kristu Jayanti College established in the year 2004 with the objective of imparting technical education to aspiring youth to mold them into the professionally competent workforce. Master of Computer Application is a three-year (six semesters) professional Master's Degree in Computer Science. The programme was designed to meet the growing demand for qualified professionals in the field of Information Technology. At present, there are 134 students in the Department. The autonomous curriculum is designed to hone strong software competencies, analytical and problem-solving skills which are essential pre-requisites for successful software professionals. The course structure and contents updated as per the latest requirement. The learning environment is intense and stimulating. The regular academic programme is enhanced by Seminars, Workshops, Personality Development Programmes, Attitudinal Workshop, Soft Skills Training, Tech-Talk Series, Student Seminar Series, Communication sessions, Paper presentations and Aptitude Reinforcement modules. Experts from industry

conduct the IET (Industry Expert Training) sessions on a continuing basis. The students have participated in seven inter-collegiate fests in this academic year and won overalls in all the fests.

The students and the faculty members exposed to the latest developments in the industry. As part of knowledge sharing, peer to peer teaching motivated amongst the students. The academic transactions are rigorous and innovative. The IEEE Student Branch of our college conducted workshops and tech-talks. College is an institutional member of Computer Society of India, and all the faculty members are life member of Indian Science Congress. Faculty members of our department acted as a resource person for the in-house workshops and also in the workshop conducted in other colleges. They also participate eagerly in various conferences, workshops, FDPs, seminars in colleges across India and different meetings happening in companies. The Department always encourages continuous learning and applying the skills in the technological domain.

GPU – A new face of computing

Prof. Velmurugan R, Associate Professor

Since researchers continue to cross beyond the limits of neural networks and deep learning in speech recognition and natural language processing, image and pattern recognition, text and data analytics, and other complex areas—they are constantly on the lookout for new and better ways to extend and expand computing capabilities. For decades, the gold standard has been high-performance computing (HPC) clusters, which toss huge amounts of processing power at problems—albeit at a prohibitively high cost. This approach has helped fuel advances across a wide swath of fields, including weather forecasting, financial services, and energy exploration. In 2012, a new method emerged. Although researchers at the University of Illinois had previously studied the possibility of using graphics processing units (GPUs) in desktop supercomputers to speed processing of tasks such as image reconstruction, a group of computer scientists and engineers at the University of Toronto demonstrated a way to significantly advance computer vision using deep neural nets running on GPUs. By plugging in GPUs, previously used primarily for graphics, it was suddenly possible to achieve huge performance gains on computing neural networks, and these gains were reflected in superior results in computer vision.

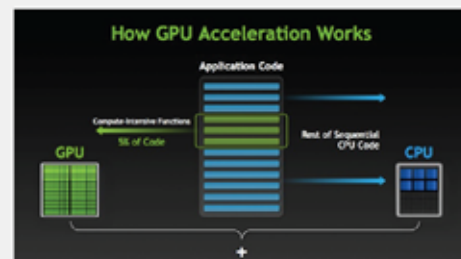
GPU-accelerated computing is the use of a graphics processing unit (GPU) together with a CPU to accelerate deep learning, analytics, and engineering applications. Pioneered in 2007 by NVIDIA, GPU accelerators now power energy-efficient data centers in government labs, universities, enterprises, and small-and-medium businesses around the world.

They play a huge role in accelerating applications in platforms ranging from artificial intelligence to cars, drones, and robots.



HOW GPUS ACCELERATE SOFTWARE APPLICATIONS

GPU-accelerated computing offloads compute-intensive portions of the application to the GPU, while the remainder of the code still runs on the CPU. From a user's perspective, applications simply run much faster.



The GPU's rapid increase in both programmability and capability has spawned a research community that has successfully mapped a broad range of computationally demanding, complex problems to the GPU. GPU computing, summarize the state of the art in tools and techniques, and present four GPU computing successes in game physics and computational biophysics that deliver order-of-magnitude performance gains over optimized CPU applications.

Major Events

IEEE International Conference on Current Trends in Advanced Computing

The 6th edition of the International Conference on Current Trends in Advanced Computing was conducted on 1st & 2nd February 2018. The auspicious inaugural function held at 10.00 AM on 1st February morning had Dr. Debabrata Das,



Chair IEEE Bangalore, Professor and HP chair, IIT-B, Bangalore and Mr. Steve Coman, Director-HR Grant Thornton shared services center as Guest of Honor. The keynote session was based on the topic Power Saving in mobile Hot Spots- and Base Stations. Dr. Debabrata Das spoke on Component, Link and Network, with respect to research in three levels as he spoke on cellular connectivity and IOT. The topics listed in regard with the workshops, technical sessions and paper representations were on:

- Power Saving in mobile Hot Spots- and Base

Stations.

- Data Visualization using Tableau Software
- Paper presentations - Natural Language Processing, Ryu Controller and Medical Image Segmentation
- Exa-Scale Parallel Computing and High Performance Computing
- Artificial Intelligence Multiview and Mirror –Network
- Embedded IoT Systems

There were 60 participants from various institutions which included faculty members of various universities and colleges, research scholars and post graduate students from all over India. We received 78 papers for presentation and publication which reduced to 19 after the expert committee review out of which 7 got presented in our conference. These presented papers will be published in IEEE Xplore shortly.



National Workshop

IoT for Smart Cities



Department of Computer Science (PG) and IEEE Student Branch of Kristu Jayanti College organized a two day National Level Workshop on Internet of Things and Smart Cities on December 14 – 15 2017. The inaugural function held at 10.00 AM on 14th December morning had Mr. Syam Madanapalli, Director-IoT, NTT Data Services, Bangalore, as the Chief Guest.

The objective of the workshop was to learn and understand in depth the concepts and current trends of cloud computing. The workshop was a hands on session on IoT for smart cities dealt with the devices, networks and cloud computing. The session was handled by Dr. Jaykumkar Singaram.

The main topic for the session was RINANU semiconductor LLP, semiconductors and cloud computing. The session also helped us to experience, learn and develop an application through IBM Watson for IoT. Dr. Jaykumar also conveyed the knowledge about how the data can be passed to the cloud and later be transmitted and retrieved.

Participants could practically explore and learn about how the semiconductor and the microcontroller work using COCOX IDE. The resource person also explained how it helps them in dealing with real time scenarios like traffic control system, buses and trains and even temperature control Hence the session was concluded.

Research Colloquium



Research colloquium is a unique practice of Computer Science department to enhance the research aptitude of the faculty members. This programme was initiated in 2011 March. At the 13th session, an ardent researcher and expert - Dr. Tinniam V Ganesh working as Cognitive Scientist, Cloud Architect & Telecom veteran, IBM shared his expertise on Artificial Intelligence and Cognitive Computing. The objective is to enhance the Research culture among the Computer Science faculty members. Mr Ganesh initiated

his presentation by sharing the information on Technology driving AI and the Stalwarts of AI in 21st century. He explained the views of two Schools of thought- the Anti AI and Pro AI schools. Later in the presentation- Major areas of research progress on AI were discussed which includes- Medicine, Neural translation, radiology, cognitive computing and even as a chef and fashion designer. He mentioned the competitors in the field as Amazon- Alexa, Microsoft – Cortana, Apple – Siri and Facebook- Face recognition.

The discussion included the major domains:

- Artificial Intelligence and Cognitive Computing
- AI – Analytics
- Machine learning and Natural Language Processing

During the discussion session Mr. Ganesh explained the prospects of academic research in AI and how it is different from industry application. The session concluded with vote of thanks by Dr. Ambika.

Alumni Interaction

The Alumni interaction with the students bridges the gap between the Course Contents and Industry standards. The aim of this session is to have an interactive session with alumni about the Career opportunities for the MCA Students in Networking Domain of IT industry, preparation for placements and other blooming trends. Ms. Rincy Cherian [2014 – 2017 Batch MCA] is one of the prominent alumni of the department. She started the session by briefing about the corporate world, heterogeneous culture, different domains in the field of computer science and the job opportunities in the future. The domain such as Networking, Cloud computing and Virtualization were discussed in detail. As the resource person was expertise in the networking more information about

the networking domain, her experience at her work place and certification details were shared. There was a questions and answer session, where the participants wished to know about selecting a particular domain of interest and its future scope.



Aleena Ann Siby
4thsem MCA

Most of our smart devices these days are incorporated with biometric authentication features to ensure improved security. Security Pin locks have been replaced with fingerprint sensors and facial recognition features. But one of the challenges that the smart device designers had to face was the space they had to compromise for the fingerprint sensors. For some smartphones these fingerprint sensors

Synaptics Clear Id

are installed either at the back panels or at the front panels of the device. Few other devices like apple, has introduced the facial recognition technology that require IR and RGB sensors accompanied by appropriate processing



resources. But these technologies do raise few challenges. Synaptics argues that sometimes fingerprint sensors at the back panels are uncomfortable to use. The facial recognition feature is

comparatively slower and sometimes can even be fooled. Having the fingerprint sensors in the front affects the display area as the bezels take too much space.

As a solution to these challenges, Synaptics has now come up with the in-display optical sensor technology. Synaptics developed its first Clear ID FS9500 in-display optical sensor that can be installed under the surface of an OLED screen. This sensor is hidden under the screen on the front. Synaptics claims these Clear ID Optical sensors to be faster, convenient and secure than the alternative biometrics. These sensors helps to provide sleek, button-free and bezel free infinity displays to our smartphones.

IoT to BloT???

In the past few years, the technologies that has been developed and introduced into the market has been insane. Infact one would say the last few year's is the time where technology has truly revolutionised our life style. We are now able to do certain tasks that we normally did in our day to day life manually, with just a tap of a button on your smartphone



ACHUTH P
2nd sem MCA

or any of your electronic gadgets. But this is not all, the last five years have introduced and given us technologies and products like:

- Personal AI's (SIRI, Google Now, CORTANA, etc..)
 - Augmented Reality.
 - Crypto currencies (Bitcoin, Litecoin...)
 - IoT (Internet Of Things).
- And the list goes on..

And now one of the most hot and most discussed topics of interest include IoT (Internet Of Things). What it basically means is, The Internet of things (IoT) is the network of physical devices, vehicles, home appliances and other items embedded with electronics, software, sensors, actuators, and connectivity which enables these objects to connect and exchange data.

Imagine everything at your home, from your electronic appliances to your water which can be controlled by a single touch from your smartphone. Yes we are close to achieving what we've only seen in iron man movies. Now even we will have a home assistant, but will never be as cool as JARVIS.

Now coming to the topic of BloT. Blockchain, one of the underlying technologies for the hot cryptocurrency bitcoin, can make IoT devices even more useful. It creates a digital record across hundreds or thousands of computers, vastly reducing the risk of hacking. We have recently witnessed a lot of these cyberattacks across the country. Ranging from our national security websites to normal email scams. It is true that digital life is going to be easy but it also has its own exploitable link. Anything online these days is hackable, hence BloT is the best security option that an individual can hope for.

AWS and Its Tools

Amazon Web Services offers a broad set of global compute, storage, database, analytics, application and deployment services that help organizations move faster, lower IT costs and scale application. It offers a broad set of management tools that allows to programatically provision, monitor and automate all the components of cloud environment and also to maintain consistent controls without restricting development velocity. The available tools of AWS are Amazon Sagemaker, Lex, Transcribe and Amazon Polly. Amazon Sager helps data scientists and developers to quickly build and train machine learning models and directly deploy them into a production-ready hosted environment.

AWS Lex helps in building



ANN RIYA VARGHESE
4th sem MCA

conversational interfaces for any applications using voice and text. Amazon Transcribe provides transcription services for audio files by using advanced machine learning technologies to recognize spoken words and transcribe them into text. Amazon Polly synthesizes the provided text into a high-quality speech audio stream. Amazon Rekognition provides highly accurate facial analysis and facial recognition along with addition of image and video analysis to applications.

Bio-inspired Computing

Bio-inspired computing is a computational process used to solve complex problem, which is modelled or constructed after design principles encountered in nature/biological systems, and tend to be adaptive, reactive and distributed. Bio-inspired computing is highly related to artificial intelligence. It combines both computational intelligence and collective intelligence. The main aim of bio-inspired computing is to produce computational tools with enhanced robustness, scalability, flexibility which can interact more effectively with the humans.

Ant colony optimization (ACO) is one of the best examples of bio inspired algorithm. ACO is a probabilistic technique which is a population based metaheuristic that can be used to find approximate solutions to difficult computational problems. In ACO artificial ants is a set of software



ASHIKA
4th sem MCA

agents that searches for an optimal solution to a given problem. Here the optimization problem is transformed into the problem of finding the best path on a weighted graph, to apply the ACO. By moving on the graph the artificial ants incrementally build solutions. This method of solution construction is biased and stochastic by a pheromone model, which is a set of parameters related with graph components whose values can be altered at runtime by the ants.

Students Achievements



JOEL J JOY
2nd sem MCA



SWAPNA S
2nd sem MCA



SHILPA ANAND
2nd sem MCA



SUMATHI M
2nd sem MCA

Mr. Joel J Joy and Ms. Swapa S presented a research article on "IT based Hybrid Architecture for Precision Agriculture" in Yukthi V3.0, Student Technical Symposium organized by Department of MCA, New Horizon College of Engineering, Bengaluru and won the Best Paper Award.

Ms. Shilpa Anand and Mrs. Sumathi M presented a research article on "Automatic Seed Categorization using K-means Algorithm" in Yukthi V3.0, Student Technical Symposium organized by Department of MCA, New Horizon College of Engineering, Bengaluru and won the Best Paper Award.

Manoeuvre 2K17

MANOEUVRE 2017, an intra-collegiate IT fest, conducted by the Department of Computer Science[PG] every year with the intention to prepare the students to equip themselves to participate in various Events being conducted inside as well as outside the college. On the 27th September 2017 function was inaugurated by Chief Guest, Mr. Sagar Koparkar, Principal Consultant, Data Semantics, Bangalore. The function started with a welcome note by staff coordinator Prof. A. Muruganantham and then Rev. Fr. Augustine George, Vice principal gave the inaugural message. Mr. Sagar Koparkar gave a very enlightening and thought provoking speech on “Emerging Trends in IT” – Technologies like Cloud computing, Big Data, Social and Mobility opportunities for students and future trends of these areas. The team names were based on Digital Assistant like Siri , Alexa , Cortana , Bixby , G Assistant and Mycroft assigned by the team heads.

MANOEUVRE 2017 consisted 10 events :

- IT Manager
- Quiz
- Web Designing
- Coding and debugging
- Google i
- Video Editing



Automated Transportation

Vidhya Shree V , 2nd sem MCA



Some notable facts when it comes to driving—93% of car accidents result from human error, and more than 1 million fatalities worldwide come from car accidents. Just look at how frequently they are reported throughout the country. Something more must be done to radically decrease these numbers and reap the economic benefits of safer and efficient roads. So, can computers really do a better job at driving and controlling traffic? The answer is yes.

Driving is always a risky proposition no matter how trained you are, for the road is shared with others who habitually bend the rules, or are simply lacking in skill. Sure, cars over the years have incorporated a number of safety measures that are essential in saving lives. Seatbelts, they are known to reduce death by as much as 70 percent when used properly. Until the 1980s, seat belt use was only 10 to 15 percent. Now it is up to 86 percent.

We can arguably predict the same scenario with driverless cars. It will encounter strong resistance at first, but judging by the history of human progress—Computer driven automobiles are inevitable. It is only a matter of determining the infrastructure and politics around them. So how will these machines work?

First, a standard GPS system is required similar to Waze or Google Maps. This will allow the car to predetermine the best path to take considering traffic conditions and other data.

Next is a system to recognize dynamic conditions on the road. This will involve cameras and a battery of sensors in the form of lasers, radar, altimeters, gyroscopes, tachymeters and more. The system will add another layer of intelligence to understand certain obstacles and recognize the road construction, crossing

pedestrians, and fallen debris among others. The hope is that in the future, vehicles would also be able to interconnect with one another, processing destinations, acceleration speeds—down to the timing of each turn. This will allow the computer to navigate smoothly given certain algorithms. Lastly, there needs to be a system that will turn all the GPS and sensor data into actions like steering, accelerating, and hitting the breaks. This is done through what is called a CAN Bus (Controller Area Network), which has already been installed in cars for quite some time.

With companies like BMW, Audi, GM Motors, Volvo, Tesla, Ford, Toyota, Intel, Google, and even Uber—promising to rollout functioning units in the coming years, traffic may soon be a thing of the past. Road accidents will at last, be at an all-time low. More and more people, who would have spent precious hours driving to and fro from work, will be free to engage in other productive tasks, or rest with relative peace of mind. Actual driving will become less a necessity, and more of a hobby.

Regardless of how we feel about it, the next phase of the road is so much closer than we think. Like a scene out of science fiction, zooming into reality.



Industry Expert Training

The Department always endeavors to bring in experts from the leading IT Industries to keep pace with the technical uptrend progression of our students towards the evolving technologies.

The objective was to specialize the students in the testing domain with respect to the use of various testing tools that are practiced in the Software Industry and also to know the method of approach in testing process on web-based and customized stand-alone applications.

- AWS - Mr. Arunkumar, the resource person, is a DevOps Engineer at Wipro Technologies holding 2 years of experience in AWS and Cloud application development. The training was held on 17 February 2018. The session was on AWS and the services associated with AWS. The session also guided on creating an AWS account to avail the usage of the services. The students practically experienced AWS

RESOURCE, Amazon S3 BUCKET, AWS Identity and Access Management (IAM), LIGHTSAIL, Amazon Elastic Compute Cloud (Amazon EC2), Amazon Elastic Block Store (Amazon EBS) and Remote Desktop Protocol (RDP).

- CASANDRA - The training was held on 17 February 2018. Apache Cassandra is a free and open-source distributed NoSQL database management system designed to handle large amounts of data across many commodity servers, providing high availability with no single point of failure. The objective was to obtain the knowledge about Cassandra and install it through Docker on LINUX platform though it can be used on Windows platform. The workshop enlightened Cassandra and its installation process on LINUX platform, connecting to the local Cassandra, key spaces in java and CQL (Cassandra Query Language).

Seminar / Workshops / 3i Organized

SI No	Date	Title of the event	Name of the Resource
1	22.02.2018	3i on "Corporate Expectations from MCA"	Dr. Benny Joseph , CEO Jubilee Mission Hospital Thrissur, Kerala
2	20.09.2017	Tech Talk Series III on "Software Development - A Deep Look Beyond Curriculum"	Mr. Amit Berry , CEO Twarann Technologies Pvt.Ltd, Bangalore
3	20.01.2018	Webinar on "IoT Big Data and NoSQL Database"	Mr. Raghu Kalyan , Big Data Lead / Architect, Data Services, Boeing

International Lecture Series

The International Lecture Series II of this academic year was held on February 14, 2018 on the topic "Better Software Engineering for Robots". The ILS was inaugurated by Rev. Fr. Augustine George. The session was handled by Dr. Jeremy. The objective of the series was to get the knowledge about RoboCalc – Software Engineering concepts in Robotic projects. He explained the traditional methodology used for designing Robotic applications and listed the drawbacks in the existing method. The project is initiated with an abstract model then it will be simulated and transferred to low level code. Robo Calc is a tool proposed by Dr. Jeremy and his team. He also explained about the tools like RoboTool, Cicrus, Z and CSP.

He also discussed the Z notation and CSP notation for Chemical detector system. He highlighted the significance of appropriate mathematical theories behind the system. He concluded in his speech that the state

of art for software engineering is improved. The participants were made clear with the technical and general concepts of RoboCalc during the question answering session with Dr. Jeremy and Mr. Gwion Sims.



Vinimay- Leadership Series

Vinimay- Leadership Series organized on 23rd September 2017 at Kristu Jayanti College Autonomous, for the MBA, MCA and PGDM students had Amb. N Parthasarathi (Indian Foreign Service, Retd) interacting with the students. The objective of the series was to introduce students to the various aspects of leadership through interaction with Leaders. The purpose is to reach out to global leaders and inspire the students through eminent talks and discussions.

Dr. Aloysius Edward, Dean of Commerce and Management, greeted the gathering in his welcome address. Fr. Lijo P Thomas, Financial Administrator and Head of Computer Science (UG) Department and Prof. Kumar, Head of PG Department of Computer Science were present.

Shri N Parthasarathi initiated his speech with the inspiring words – “We are lucky to be born in India- a land of vast opportunities for education, economy and career growth”. He commented that a nation’s foreign policy is entirely for the prosperity and survival of the citizens of the country and is formulated within the country.

He narrated the growth of Indian Economy and Foreign policies since its independence, starting with

our scarcity of food, progress through the Green and White Revolutions, which helped India rise up and one of the largest suppliers of milk in the world. The flexibility in foreign policy that was brought in by Prime Minister Narasimha Rao in 1991, the Look East Policy and formulation of ASEAN were major steps that helped India develop its relation with other nations.

Some of the highlights Shri N Parthasarathi mentioned was,

- The growth of Indian Economy and Foreign policies.
- The flexibility in foreign policy that was brought in by Prime Minister Narasimha Rao in 1991.
- Views on the Doklam issues, and the steps taken by North Korea for self defence.

While answering to students queries Shri N Parthasarathi said he is highly positive by the steady growth of India in all aspects- technology, education, human resource and economy. There is no question of replacing another nation, say China, in terms of PPP or industrial growth as we do not aspire to be a sole super power. . Vote of thanks was proposed by Ms. Shruthi C D of V semester MCA.

Faculty Publications

Name	Details of the Article
Prof. Kumar R	Motif Discovery Comparison using Multivariate Rhythm Sequence Technique and Dynamic Time Warping (DTW) in Time Series Data, International Journal of Science and Research (IJSR), Volume 6 Issue 8, August 2017, ISSN (Online) 2319 – 7064
Prof. Jyothi Manoj	Analysis of the effect of BREXIT on the Stock Indices of US, UK and India: An Intervention ARIMA Model, Asian J. Management, Volume 8 Issue 4, October -December 2017, ISSN 0976-495X (Print) 2321-5763 (Online)
Prof. Velmurugan R	A Point of Two Mode-Session Logs Based Web User Interest Prediction System From Web Search Engine, International Journal of Computer Sciences and Engineering, Volume 5 Issue 12, December 2017, ISSN 2347 – 2693
Prof. Muruganantham A	Analysis of Multilevel-Semantic Prediction based on User Point of Sentiment Opinion(MSP-UPS) in Social Web Mining, International Journal of Computer Sciences and Engineering, Volume 5 Issue 12, December 2017, ISSN 2347 – 2693
Prof. Velmurugan R	MSECA: Microblog Subspace Ensemble Cluster Approach For Predicting User Interest On Semantic Web Logs Recommendation In Web Mining , International Journal of Creative Research Thoughts
Prof. Muruganantham A	LSA-MSC: Lexical Semantic Analyze Based Multi-Level Semantic Clustering for User Opinion Prediction In Web Mining Resource, International Journal of Creative Research Thoughts

What is CloudCoins ?

CloudCoins provide a theoretically "perfect" global currency that cannot be counterfeited, double-spent, mined or lost. Your exchanges are 100% private, requiring no public ledgers, accounts, or even encryption. CloudCoins form a monetary system that is absolutely fair and ethical and requires no special software or downloads, and, like the Internet itself, cannot be brought down by governments, hackers or even nuclear weapons.

CloudCoins consist of 3,200 bits of secret data that only the owner knows. These bits are written into jpg images or in text files that can be stored on your computer and sent to your people by email, Skype, SMS, Facebook or even by regular old paper mail.

How to use CloudCoins

When you want to buy something, you will share the secret numbers with the seller. Now you and the seller know the numbers. Anyone who has the numbers can change the numbers using the RAIDA. There are servers on the Internet that work with other servers to



Abhilas M
2nd sem MCA

create fault-tolerant storage systems called Clouds. The RAIDA is made up of 25 Clouds located all around the world in different jurisdictions and run by independent RAIDA administrators.

What is the RAIDA?

Redundant Array of Independent Detection Agents. The RAIDA is a global counterfeit detection system that is indestructible and cannot be tampered with or hacked. Neither nuclear bombs, comet strikes, world wars, dictatorships or government hackers can bring down the RAIDA. Quantum safe, self-healing, simple, fast and reliable, the RAIDA can detect the authenticity of a CloudCoin within milliseconds.

Experiential Learning

Sl No	Date	Title of the event	Venue	Name of the Student
1.	07.09.2017	IEEE Volunteering Activities	Hotel Chancery Pavilion	Ms. Leena KS Ms. Preema Jyothi Bennis
2.	09.12.2017	Chatbots	Cetrix Solutions Bangalore	Ms. Swathi HM, Ms. Alafia J Mr. Kynsai Hunlang Iangrai Mr. Deepak Dulal , Mr. Shail Khan Ms. Fizhan Kausar Mr. Shanjeet Sharma
3.	23.11.2017	IEEE Sensors Workshop	Hotel Chancery Pavilion	Ms. Leena KS Ms. Preema Jyothi Bennis
4.	21.02.2018t	Conference on Digital Darwinism	Hotel LeMeridien	Mr. Boaz Titus, Mr. Cyril George, Ms. Mittu Shaji, Ms. Shriishwarya, Mr. Ravishankar, Ms. Soumya Alex, Ms. Vidhya Shree V, Ms. Vijaya Lekshmi Mr. Kynsai Hunlang Iangrai, Mr. Nilesh Tomar Mr. Sahil Khan, Mr. Raghuram, Ms. Sandhya, Mr. Rahul Dey
5.	24.02.2018	Overview of Deep Learning and Neural Networks	Zaper Media Lab Bangalore	Mr. Deepak Ghatkae Ms. Shahjanhan. Ms. Leena KS Ms. Sacheetha T, Mr. Santhosh Kumar

Sargotsav

Sargotsav, is a Intra Collegiate cultural fest organized by Kristu Jayanti College every year for the students of Post Graduation where they portray their versatility, competence and expertise in cultural and literary competitions. Sargotsav is a get away from all the academic hustle and lets the students celebrate the joy of art.



1st Prize - Eastern Group Dance



3rd Prize - Mime



2nd Prize - Flower Adornment



Tech Cross Word

A	R	G	U	E	M	E	N	T	S	H	N	R
E	B	Z	E	R	V	E	R	L	W	O	M	B
H	S	R	L	F	E	A	D	O	I	S	W	A
H	U	A	Q	E	Z	D	B	S	N	R	Z	C
P	T	R	A	N	S	C	R	I	P	T	S	K
A	E	S	C	E	N	A	M	O	D	N	C	S
R	S	I	N	T	P	O	N	R	B	E	R	P
G	U	K	F	M	N	D	A	T	C	M	I	A
A	O	B	O	I	E	O	A	H	T	U	T	C
R	M	C	T	E	B	M	A	M	E	C	E	E
A	H	O	P	Y	R	R	A	G	E	O	R	T
P	R	S	E	O	T	C	I	B	H	D	I	Z
R	W	K	F	W	S	X	W	K	S	Z	A	H

Answers

- | |
|-----------------|
| 9. SPEED |
| 8. KEYBOARD |
| 7. BORDER |
| 6. SHEET |
| 5. FORMAT |
| 4. BACKSPACE |
| 3. PARAGRAPH |
| 2. DOCUMENT |
| 1. ARGUMENT |
| 10. CHART |
| 11. MAC |
| 12. TRANSCRIPTS |
| 13. COMPARISON |
| 14. MONITOR |
| 15. USB |
| 16. CRITERIA |
| 17. MOUSE |



Software Testing - Automation

Vignesh Kumar Balasubramanian
Technical Test Lead, Infosys

Happy to start with the quotes of Steve Jobs - "My favorite things in life don't cost any money. It's really clear that the most precious resource we all have is time."

In Software testing, the world will be looking you as a smart if you are expert in saving your time by automating your manual repetitive tasks. If I say you to become an automation expert, you don't need much programming skills – how do you feel? Yes, it is absolutely true with the open source "Katalon Studio". It is built on top of the Selenium, Appium frameworks and provides the wonderful "Record and playback" feature for automating Web and mobile applications. It nicely integrates with Git, continuous integration tools and testing tools like JIRA.

Have fun by automating!

Department Laurels



St. Aloysius College, Mangalore



Surana College, Bangalore



Jyothi Nivas College, Bangalore

Faculty Achievements

Prof. K Arunadevi



Served as a Keynote speaker on Deep learning and it's applications and chair person for paper presentation session in National Conference on Advanced Computing Technologies and Intellectual Property Rights , St.Joseph's College for Women, Tiruppur on 16.02.2018.

Dr Ambika P



Dr. Ambika is been recognized as a PhD Research Supervisor in VTU, Bengaluru.

Upcoming events

- * Tech Talk Series 17th March 2018
- * Student Seminar Series 23rd March 2018

PLACEMENT

Companies Visited



Great-West Financial



Synchron Services India Pvt. Ltd.



Data Semantics Pvt. Ltd.



NABLER



Sonu Abraham



Saritha Maria



Sudeep Stephen



Daniel



Jerin John



Aravindan



Jijo Joseph



Banushree



Geetha



Sudeep P



Ashwin P



Vishnu Prasad



Neha Paul



Angela Celesteena



Athira Thomas