

Kristu Jayanti College

AUTONOMOUS

Bengaluru

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

For Private Circulation only

Dept. of Computer Science

Interface

Vol: 4 | Issue: 1 | February 2017

Inside Pages

MESSAGES

FACULTY ARTICLES

STUDENTS SPEAK

DEPARTMENTAL ACTIVITIES

STUDENT ACHIEVEMENTS





Champions all the Way



Galaxia Science Exhibition



Platform to Innovate

Kristu Jayanti College Autonomous

K. Narayanapura, Kothanur P.O., Bengaluru-560 077, Karnataka, India. Tel: 080-28465611, 28465353, 28465770, Fax: 080-28445161 | E-mail: info@kristujayanti.com | www.kristujayanti.edu.in



Kristu Jayanti College

AUTONOMOUS

Bengaluru

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

- An Institution managed by CMI Fathers
 An Autonomous College under Bangalore University
- Awarded the title, 'Best College in South India' by ASSOCHAM at the Higher Education Summit & National Excellence Award 2016

Kristu Jayanti School of Management

MBA & PGDM

(International Finance, HR, Finance, Marketing, General Management)

*Kristu Jayanti College of Law

BA-LLB | BBA-LLB | B.Com LLB

Admission Notification

Application forms are available in the college Website

www.kristujayanti.edu.in

Apply now

Kristu Jayanti College (Arts, Commerce & Science)

FACULTY OF SCIENCES

MCA Master of Computer Application

M.Sc. Biotechnology

M.Sc. Microbiology

BCA Bachelor of Computer Application

B.Sc. Computer Science, Mathematics, Electronics

B.Sc. Computer Science, Mathematics, Statistics

B.Sc. Biotechnology, Biochemistry, Genetics

B.Sc. Microbiology, Biochemistry, Genetics

Research Centre - Biotechnology

FACULTY OF COMMERCE & MANAGEMENT

M.Com. Master of Commerce

M.Com. Financial Analysis (FA)M.Com. FA CGMA Integrated

MA Economics

BBA Bachelor of Business Administration

BBA CGMA IntegratedB.Com Bachelor of Commerce

B.Com Professional

B.Com ACCA Integrated

B.Com Tourism

1 Year PG Diploma for Working Executives

(Marketing Management | Human Resource Management | Business Administration)

FACULTY OF HUMANITIES

MSW Master of Social Work

M.Sc. Psychology

MA English Literature

MA Mass Communication & Journalism

BA Journalism, Psychology, Computer Science

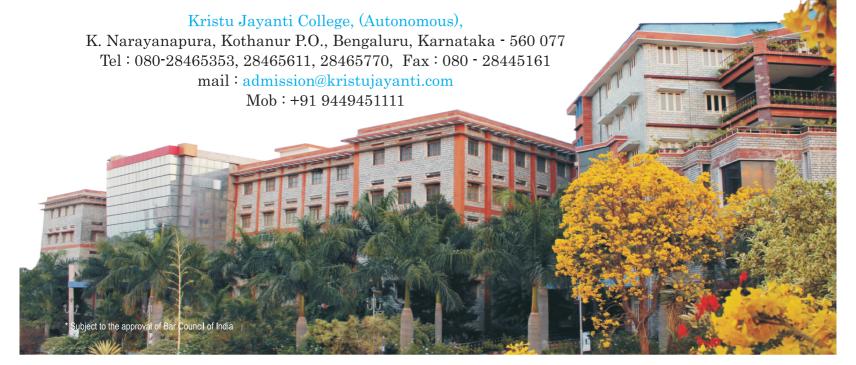
BA Journalism, Political Science, English Literature

BA Journalism, Psychology, English Literature

BA History, Economics, Political Science

BA History, Tourism, Journalism

Research Centre - Social Work



From the Principal



Fr. Josekutty P.D, Principal

We are living at a time where technology is influencing every walk of human life. The field of education is no exception. The way in which the content delivery is happening, the methodologies for transmitting the knowledge, the way in which knowledge is preserved and retrieved all has seen a quantum of change. In fact technology is supplementing the various ways in which knowledge assimilation as well as dissemination is happening. Technology has enabled the teaching learning process to be made more learners centric.

The department of Computer Science through their various innovative programs has always strived to impart technical skills and to provide a platform for each student to excel and innovate with technology. The newsletter "Interface" is a creative canvas portraying all the activities of the department for the last one year. I congratulate the Department of Computer Science in bringing out the newsletter and wish them all the best in this creative exercise.

From the Vice-Principal



Fr. Augustine George Vice-Principal

Technology in its myriad forms is influencing every walk of human life. Information technology is evolving as the backbone of the modern society with its wide range of applications. Mobile computing is making accessibility to information with so much ease.

Today, in the field of education the conventional teaching methodologies are getting replaced with new pedagogies with the support of information technology. The receiver of knowledge is more important as there are numerous sources disseminating the same knowledge in diverse ways making it more learners centric. Technology has brought in inclusiveness in the field of education as virtually nothings stands as a barrier for an eager learner. Rightly technology is complementing the teaching learning process.

Kristu Jayanti College tries to empower leaners and to groom their overall personality. Every Jayantian is challenged beyond their comfort zone and are encouraged to think critically and creatively. The Department of Computer Science offers a platform for every student to pursue their aspirations, to innovate and to excel through their various academic and technical platforms.

I congratulate the Department of Computer Science in taking an effort to portray all its activities through this newsletter and I wish them all the best.

From the HOD



Fr. Lijo P Thomas Head, Dept. of Computer Science

A confluence of developments in education worldwide suggests that we are indeed at a crossroad, and we must look to the future rather than the past as we craft strategies and leverage resources to ensure that every student is prepared to address the challenges smartly. We must provide multiple pathways to success so that every student can tap their potential based on their unique set of skills and disposition.

The department of Computer Science believes that every student must be prepared for success in an ever-changing and diverse world. The hallmarks of the department-persevere and outshine- encourages zealous involvement in web-enhanced courses, dissemination of information and helps hone the technical prowess of the students.

The department organizes collaborations with experts from the industry and initiates value added and certificate courses to bridge the gap and augment their expertise. The Computer Academy organizes intra collegiate fest -Synchronize, intercollegiate fest-Xactitude and science exhibition-Galaxia to reap a holistic growth. By assimilating realistic erudition into the academic programme, scholars develop a competence that nurtures critical acumen and constructive exchange of ideas.

The relentless quest for knowledge, persistent effort of dedicated faculty and students, their perseverance and commitment has helped in efficaciously traversing the years of its existence, empowering students with comprehensive understanding, talent and training both at the academic level and in the competitive international industrialized market. Kudos to the department of Computer Science that has been playing a noteworthy role in the College and has endowed the department to scale new heights, transmuting the visionary zeal into actuality.

About the Department



Prof. Sevuga Pandian A Co-ordinator, Computer Science (UG)

The Department of Computer Science (UG) has a proud history spanning over one and a half decades since its inception. The spirit of innovation and academic excellence have been defining characteristics of our department over the years. Our programs are geared to provide an ideal blend of theory with a hands-on education for our students. Our students receive a broad education that includes a relevant contemporary industry related curriculum, excellent problem solving and communication skills, and the ability to work in cross-disciplinary teams.

The IT industry is changing rapidly and to keep pace with rapid changes in the IT sector; the Department of Computer Science (UG) has an auspicious club Computer Academy

with more than 600 members. Computer Academy strive to confluence between the technology and academics through series of programmes like Guest lectures, Workshops, Seminars, Industrial Visit, Intra, Inter Collegiate fest, Science Exhibition and Technical Community activities.

An intra-collegiate fest "Synchronize" is organized for the first and second year students of computer science by the third year students where they get an opportunity to organize, participate and showcase their potentials. "Xactitude" is National level inter collegiate computer science fest envisaged by the academy where students from other colleges can showcase their intelligence and creativity in myriad facets of information technology. The innovative club of our department initiated "Galaxia" a two day science exhibition in which students from our college and other colleges develop computer science, electronics, statistics and mathematics projects which provide them an opportunity to experiment and innovate along with the curriculum learning.

The Department has an Academic Alliance with EMC². This Academic Alliance, one of the industry's first initiatives created to

address the cloud and data science skills gap, helps to ensure the industry has a strong pipeline of graduates to meet its future needs. Membership in the Academic Alliance provides free access to "open" curriculumbased education, covering topics such as information storage and management (ISM), virtualization, cloud computing, and Big Data analytics. The Academic Alliance provides faculty with free training and resources to teach information infrastructure technologies.

Department of Computer Science signed a MoU with University of Fraser Valley, [Vancouver, British Columbia, Canada]. This is a huge benefit for BCA students. It's a chance to go abroad and do their one year extended study and get their degree from the UFV.

The shared values of our department are exemplified in various extension activities like Social Outreach Programme (SOP) and Computer Literacy Programme (CLP). Social outreach programmes provides the students an opportunity to recognize their social responsibility to give back and contribute to the development of the society.

Faculty Articles

COMPUTATIONAL CREATIVITY



Ms.K.Kalaiselvi

Computational creativity is a multidisciplinary endeavor that is well placed at the intersection of the fields of artificial intelligence, cognitive psychology, philosophy, and the arts. This emerging area is an application of the branch of Evolutionary Computation called Genetic Algorithms. The goal of computational creativity (CC) is to create a model, simulate or replicate creativity using computer algorithms. CC enables us to construct a program which is in par with the human-level creativity. It formulates an algorithmic perspective on creative

behavior in humans. It enhances the creativity of humans, to design programs even without being creative by themselves. The field of computational creativity concerns itself with theoretical and practical issues in the study about creativity. Theoretical work on the nature and proper definition of creativity is performed in parallel with practical work on the implementation of systems that exhibit creativity, with one strand of work informing the other. It is also referred to as artificial creativity, mechanical creativity, creative computing or creative computation

Defining creativity in computational terms

Computational creativity is the combination of novelty and the act of turning new and imaginative ideas into reality. Creativity is characterized by way the world is perceived in new ways,

recognizing hidden patterns, connecting different unrelated phenomena, and to generate solutions through computational calculations. The solution should be novel, useful, should have intense motivation and persistence. It should reject previously accepted creative ideas and should provide clarification for a vague problem. Computational creativity is a developing area of research which is still hampered by a number of fundamental problems. Creativity is very difficult and close to impossible to define in objective terms. Series of question arises as, is it a state of mind, a talent or ability, or a process? Creativity takes many forms in human activity, some are eminent and some are mundane.

Perceptions

CC can be accomplished either by topdown approach or by bottom-up approach. Computational psychologists involved in artificial neural network research have developed a model using bottom-up approach driven by genetic algorithms. Many computational psychologists have followed this perspective and have designed complex system behaviors. Simple algorithms could be trained to re-create the mind's complex imagination.Artificial neural networks have been used to model certain aspects of creativity. A neural network was trained to reproduce musical melodies from a training set of musical pieces and predicting listener expectations. The network was able to randomly generate new music in a highly uncontrolled manner.

Areas of Application

Many areas have been identified so far for the application for Computational creativity. They are Exploratory and transformational creativity, Generation and evaluation, Combinatorial creativity, Conceptual blending, Linguistic creativity, Story generation, Metaphor and simile, Analogy, Joke generation, Neologisms, Poetry, Musical creativity, Visual and artistic creativity.

There are some deep thoughts and issues about computational creativity to be answered faithfully.

· Can creativity be hard-wired? In existing systems to which creativity is attributed, the creativity is considered

- to be by the system or by the system's designer.
- · How to evaluate the computational creativity? What distinguishes research in computational creativity from research in artificial intelligence generally?
- If a novel creativity is considered to be rule breaking, how is it possible for an algorithm to be creative?
- · If a machine can do only what it was programmed to do, how can its behavior ever be called creative?

If these queries are answered and dealt accurately, this field of evolutionary approaches will be a solution to bridge the gap between man and the machine.

Conscious Computer



Ms. Vinothina V

A computer can become conscious with the emerging technique of machine learning. It deals with programming the system to learn, respond and improve with experience automatically. This helps the machine to make intelligent decisions based on learning and experience. Machine learning is considered as a data analytical procedure that automates analytical model building. Through learning and experience, the machine understands the complex pattern undergone on the data set using complex algorithms. This algorithm uses statistical learning techniques to unearth different dimensions in data set which can be used for make predictions. Hence writing machine learning algorithms is a challenging task.

The first automation of

machine started from eighteenth and nineteenth centuries by replacing human power with machine. The next automation started by executing repetitive tasks that had previously been carried out by teams of people, such as payroll or stock taking. Thus, humans were liberated to focus on tasks that required considered thought and judgements. In this Bigdata era, machine learning helps us clear the way by processing and making sense of that information. Machine learning is defining the industries of the next generation, especially true for the new field of cyber security.

In the age of information, every day 2.5 Quintillion bytes of data are created. Ben Walker, Marketing Executive of Voucher Cloud suggested that data generation by 2018 will be 50,000 GB per second. It is impossible for human beings to explore this huge amount of information gathered in a network. But machine learning facilitates machine to make logical, probability-based decisions and undertake thoughtful tasks from GBs of data. As machine learning require complex algorithms and overarching framework to interpret the results produced, it is difficult to

develop and deliver.

The first and foremost step in machine learning algorithm is classifying datasets based on a dimension. In order to improve the classification output other dimensions can also be added. By applying statistical learning, identifying the boundaries of the data dataset using math is the significant process in the machine learning algorithm. A Training model is created from the dataset to represent the relationships between each pair of dimensions. From the relationship patterns can be predicted. One method for making predictions is called a decision tree, which uses a series of if-then statements to identify boundaries and define patterns in the

Machine learning at work in a number of different commercial and industrial fields, for example:

Payment processing companies can use state-of the-art machine learning techniques to build models which can identify fraudulent payments in real time. Online video services use algorithms to understand the viewing preferences of customers in order to provide tailored programme

recommendations for subscribers. Advertising firms are able to use analysis of browsing history to determine which adverts to make visible, making targeted decisions that deliver greater success than would otherwise be possible with human marketers.On-board computers in cars produce huge amounts of data which can be distilled to provide engineers with a better understanding of how customers actually use the vehicle, and also assist in the prediction of part failure. In healthcare, similar data collection processes mean that wellbeing can be closely monitored, problems highlighted earlier and therefore the risk of serious situations developing can be reduced.

Much of today's existing machine learning is supervised, however. This means that in order for the machine learning to operate successfully, there needs to be prior knowledge of the potential outcomes pre-programmed by a human. In industries where behaviors are well understood, these can prove more than adequate for assisting with product development or consumer safety.

Google's Machine Learning technique could save you from potential blindness. In a paper published last year by Google's research team, the research team investigated how machine learning could be used to screen diabetic retinopathy, an eye disease triggered by diabetes, which could lead to potential blindness. The results showed that the algorithmic performance was at par with that of an ophthalmologist. The results also illustrated how Machine Learning technology could have a positive impact through early detection. This is an early example of the kind of changes that will happen with machine learning.

Internet major Google is betting big on artificial intelligence and machine learning in the coming years, it's CEO, SundarPichai said. Google has strengthened focus on Machine Learning and Artificial Intelligence, and also highlighted how advances in deep learning algorithms are a core part of what Google has in store for the future. Machine learning has great scope in upcoming years and is one of the career opportunities for the students. The skills set necessary for machine learning jobs includes knowledge in Python/c++/R/Java, probability and statistics, Applied Math and algorithms, Distributed Computing, expertise in Unix tools, familiar with Hadoop and Digital Signal Processing Techniques. Make the machine conscious by

contributing our consciousness......

ALUMINI SPEAK

My College Life



Ms.Deepa M A

First, it was an exciting journey of my

Kristu Jayanti College is so popular and it is known for its achievements, vision, time management etc. I had my own expectations and opinions which turned out to be more thrilling to pursue my

A famous person said "Time can be your best Friend or your worst enemy, depending on whether you use it or waste it". Yes it is so true that, it all depends on us how our life should be. Here at this institution, the equal importance given to both curricular and extra-curricular activities is ultimate, which helps students to excel in both the areas. Ethnic day, Nrityanjali, college day, sports etc. and

on the other hand Galaxia, Xactitude which gives so much of exposure to the outside world in knowing the technologies.

The amount of support,I received from the management is tremendous, which helped me to excel in the studies.

Today, being a working professional, when I look back, my college days were the best . I heartily thank my teachers for believing and encouraging me to reach my goals and a special thanks to Fr. Lijo P Thomas and Fr. Augustine George for their constant support. I am proud to be a Jayantian.

A path that I will never regret, taking.



Mr.Jobith M Basheeer

I remember the very first day that I walked past the gates of Kristu Jayanti College, unsure of what this college had to offer to me and unaware of the course that my future would take if I joined this

college. With less conviction and more confusion I walked down to the reception and asked for the application form. Everything after that was just meant to be I must say. The college embraced me as one of them, made me a part of the Kristu Jayanti Family, as I became a Jayantian.

Choosing Kristu Jayanti has been one of the best decisions that I have made in my life. From the faculty, the management to the amenities that are provided to the

students was the right habitat for me, to learn & grow, not just study. Kristu Jayanti brought out real potential in me, by showing faith and support in all our endeavors. Right from the very first year letting us participate in Inter & Intra Collegiate fest, Science Exhibitions and other cultural events.

Galaxia '13 is unforgettable day in my life, marking the start of many such small victories, which were yet to come. This platform raised me as an

Individual and also as a Developer. Synchronize and Xactitude the intra and the inter collegiate fest is again something that taught me a great deal, something that I would have never learned in classroom. Comradery, Responsibility and Team work are some of the valuable lessons that I have gathered along the way. Throughout the 3 years of the under graduate course there were many life changing decisions that led to who I am and where I am today. New friends, New influences, New paths.

One such path led to the co-founding the web development company with my

friends, "THREE38 inc". Probably this is when the entrepreneurship bug bit me. Memories of the first website that we developed for the registration of Xactitude still lingers within me. The very first Android Application that we developed, again for the same fest. The first AI Chat App "Xile". All of these are memories that I will cherish forever. Sometimes I wonder, what if, I would have not been enrolled into Kristu Jayanti College?

All our endeavors were always supported by the teachers and management. They have been with us through the thick n thin. Cheering in our small achievements and offering a shoulder in the worst of times. There were times when i was low, but there is something about this college that brings out the best in everyone. At the end of the last year, when it was time to leave, say goodbye to a journey that was both exciting and eventful, it was hard. To some of us this college is not the second home, it comes first than the rest. I guess, I belong to the later, may be that is why choosing to spent 3 more years for Post Graduate Course in Kristu Jayanti was never in doubt.

STUDENT SPEAK

Technology and student life.



Mr. Aashish Dulal IV BCA - A

The effect of Technology in every individual across the globe is remarkable. Human beings had found a new perception to live life with the technology. Specifically speaking it has helped and had a positive effect on the people who are disabled or should I say special human (Stephen Hawking) in working right from the place where they live or taken care. If I were to relate how my life or studies is affected here in Kristu Jayanti College, then I would rather smile and say tremendously. My college had not spared any opportunities to shape a student career.

I, personally feel and I am not playing into gallery that life here in KristuJayanti College is far better than any other and I can share about my personal experience when the first time I entered the college entrance as a Jayantian. It was a moment of proud when I saw Beloved Dr Abdul Kalam's photo receiving honour from our Principle on the wall of the college and other honourable personalities who had achieved a milestone in the career. That was one point of time where I felt I made the right decision joining KristuJayanti College. Talking about the environment of my college I can say it is homely and holistic. Also, the utilization of technology by our college is beyond appreciation. I believe very few colleges in India or across the globe has a system that we have here in our college. We are encouraged to use our computer for educational purpose not verbally but we are given our own college e-mail id where a professor after completion of each chapter sends notes and we can share our doubts, take appointment to clear it. Not just that our college publishes result, attendance, etc online which can only be access by individual which is one of the best thing I feel. We can access internet facilities only for education search. One can save their project in college database. Seminars, Workshops, etc most of them related with the current technology are held to encourage the student most Saturdays. Above all college conducts fests of various departments to enhance the capability of an individual and think extra apart from the academics. As a technical student I feel which is important and it will certainly help in personal development.

If I were to sum up, then I must say technology had and will be changing the world for good. It is a continuous process for which there will never be an end point. I see a clear scope of graduates like us, a better future is waiting and Kristu Jayanti College is helping me and every student to move forward.

VICHAARMANTHAN



Vichaarmanthan is an is an interactive session with a visionary setting sparks in the minds of young Jayantians. The Vichaarmanthan on 28th of March 2016 was marked by the presence of the ISRO Chairman, Mr.A S Kiran Kumar. The chief guest spoke with an enthusiasm true to the spirit of his profession and his bright personality. PadmaShri A.S. KiranKumar spoke about the role played by Indian Space Research Organisation, in ensuring that space technology is harnessed for the wellbeing and upliftment of the society. His speech touched upon the inception,

development and upcoming projects envisaged by ISRO .He spoke on the communication satellites which support telecommunication, television broadcasting, satellite news gathering, societal applications, weather forecasting, disaster warning and Search and Rescue operation services. He also spoke on the various earth observation satellites used for a multitude of applications in the areas of land and water. He also threw light on the navigation satellites that meet the emerging demands of the Civil Aviation requirements and user requirements for positioning, navigation and timing based on the independent satellite navigation system. Varieties of instruments have been flown onboard these satellites to provide necessary data in a diversified spatial, spectral and temporal resolutions to cater to different user requirements in the country and for global usage. The data from these satellites are used for several applications covering agriculture, water resources, urban planning, rural development, mineral prospecting, environment, forestry, ocean resources and disaster management. He elaborated on Space Information System for post offices and geo tagging for post offices to improve efficiency.He also spoke on the Mars Orbiter Mission to explore and observe Mars surface features, morphology, mineralogy and the Martian atmosphere. The complexities of each mission and the hard work that goes behind each of these missions were explained with centum perfection. The chief-guest also spoke about the plight of the earth and made the audience realize that we are the cause for it. The speech ended with a message "Be the change ".The Chiefguest address was followed by a question answer session. The questions students raised to Padma Shree A S Kiran Kumar ranged from the existence of aliens to setting up of the International Space Station. Thus the Vichaarmanthan was infact an eye-opening session on space and its opportunities.

FDP ON .NET FRAMEWORK



Department of Computer Science (UG) has organized a two-day In-house faculty development program on .Net Framework on 23rd and 24th November 2016.The resource person was Ms.Aruna Devi, Faculty, Department of Computer Science (PG).The session covered on the various aspects of .Net Framework.A hands on training session was also held as part of the FDP.

Workshop on R software



A one day workshop on R software was organized for III Semester BCA students by Ms.Suni Ajaykumar and Ms Liji George ,Faculty Department of Computer Science. The basic concepts of R software for data analytics and data visualization were introduced to the

students.

The first session was on R tools for basic Data Analytics and consisted of Introduction to R, Assignment operators, Basic R functions, Matrix construction, Different built in statistical functions, Construction of frequency distributionThe second Session was on data visualization techniques and consisted of Simple bar diagram, Sub divided bar diagram, Box plot, Pie chart, Scatter diagram, Histogram, Frequency curve. The students were exposed to the statistical tools in built in R for data analytics and data visualization techniques. They were actively involved in the sessions and hence the workshop was very productive.

Data Sciences Academy



Data Science Academy was inaugurated on 2nd July 2016 by Mr. Partha Mazumder, Director of Consumer Marketing & Analytics Time Inc. In his inaugural he address spoke in detail about Big Data Analytics, the potential of data science, how world markets are influenced by consumer preferences and data analytics. He explained how students can make use of their college learning to explore data sciences.

GUEST LECTURES Network Security



A guest lecture on the topic "Network Security" was organized on 23rd July 2016 for the third semester and fifth semester BCA students. The Resource person was Mr. Sanal Kumar, Training Manager, NETCRAFTX, Bangalore. He started off the lecture by giving a small introduction on the basics of networks and spoke on the differences between a router and a switch. He also dealt on the

structure of IP address and its format. Basics of network security was also discussed. He spoke in detail about "CIA", Confidentiality, Integrity and Availability, which forms the backbone of network security. The session was very interactive and the students availed this opportunity to clarify their doubts in this domain.

Android-The-Future



There was a talk organized for the final year BCA and BSC students of the department, on 10th December 2016. Ms. Jitha who is a software engineer at Samsung addressed the students of the department and explained how Android would be the future. She motivated the

young minds to increase their competency levels by utilizing all the resources and become experts. She told the students to develop small applications so that they can gain the potential to build their future.

Software Testing

The lecture was organized for the final year BCA and BSC students of the department, on 3rd December 2016. Ms.Selvi who is a freelancer in software testing domain addressed the students of the department and she created interest in students in testing, by giving real time examples of how poor testing of a software can even threaten the lives of

people as in the case of China Airline crash in the year 1994. The talk was useful to the students as they were given the overall idea about testing. Finally the talk ended up with a quote given by Ms. Selvi, saying that "In God we trust, the rest we test", which tells how important software testing is



Networking Technologies

On 13th February 2016, a session on "Networking Technologies" was organized for VI Semester BCA and BSc students. Mr. Pavan Kumar K, System Executive, was the speaker. He elaborated on various networking technologies which is dominating the present corporate sector. He also briefed

on various networking courses based on the expectation of the industry. He also spoke about the importance of language and communication in their career. He interacted with students and motivated the students to complete few certification courses along with their study

Mathematical modeling

Department of Mathematics conducted a Guest Lecture for B.Sc students on Mathematical Modeling by Dr Pranesh S, Professor, Department of Mathematics, Christ University on 20th July 2016. The session dealt with various aspects of Mathematical modeling and its day to day applications.

Synchronize



SYNCHRONIZE 2K16 is an intra-collegiate IT fest organized by the Department of Computer Science (UG), in order to provide a platform for students to showcase their potentials, develop leadership qualities and team work. The final year students organized the fest with an innovative spirit for the first and second years to provide them with an opportunity to organize, participate and showcase their intelligence and creativity in myriad

facets of information technology. The fest was well organized under the able guidance of Faculty Coordinators Mr. Anthony Vincent and Ms. Ayshwarya B and the leadership of student coordinators Mr. Abraham Samuel Bokki (V BSc-CSME) and Ms.Madhuri Singh (V BCA C).

The first and second year students were equally divided into four groups and this year, the groups were named after the code names of

Emulators and the group names are Nox, Amidous, Genymotion and Andy.Fifteen events were conducted as a part of this intra-collegiate IT Fest namely Web Designing, Photoshop War, Coding and Debugging, Movie Making, Treasure Hunt, Gaming, Stat Event, Math Event, Electronic event, Lecture Contest, IT Quiz, IT Manager, Pick and Speak, Best Tech Team, Product Launch..The fest was inaugurated by Mr. Anil Kumar Muniswamy, Managing Director, SLN Technologies Pvt Ltd. Bengaluru.He spoke on the emerging technologies in IT Industry to aspire the students and also threw light on the current trends of the job market. The star of Synchronize 2K16 was won by Mr. Mohammed Samssudin of III BCA B. The group Genymotion under the guidance of the faculty members Mr. Sarvannan and Ms. Ann Mary bagged overall championship in Synchronize 2K16.

Social Outreach Programme

The Social Outreach Programme for the second year students of Computer Science Department was organized from 16th August 2016 to 19th August 2016 from 1.30 PM to 4.30 PM. Two ashrams were visited as part of the programme. The objective of the social outreach programme isto sensitize students about the realities of the society and to develop people oriented attitudes and concern for others.

On 16th and 17th August, 2016 the students of III BSc (CSMS/CSME) and III BCA A visited Thirumugha Ashram which provides shelter for around 95 mentally challenged men. The students were in the ashram from 2.30 PM to 4 PM on these days interacting with the inmates. The inmates expressed their feelings of happiness when students visit



them and spend time with them every year. On 18th and 19th August, 2016 the students of III BCA A and B Section visited Thrithwa Ashram which provides shelter for 45 mentally challenged women who are differently abled and are taking daily medications. These inmates are brought to the ashram from streets, railway stations, and some rehabilitation centres. All the inmates lived like a family and the volunteers took very good care of them.

The students supported the place of visit

by providing grocery items, vegetables, fruits, snacks and toiletries. They also entertained the inmates by few cultural programmes and by conducting some games for the inmates. The inmates actively participated along with the students in all the activities. The students could inculcate the habit of helping the needy and creating the respect for the society they live in. The visits made each student to count their own blessings.

INDUSTRIAL VISIT

ISRO

A visit to ISRO situated at Vimanapura Post of Bangalore, Karnataka was organized on 1st of August 2016. ISRO has produced more than 50 satellites including the INSAT series, the IRS series, as well as the GSAT communication satellites.

The students were briefed on the types of satellites, applications and properties like height, weight, velocity and purpose of the different satellites. During this industrial visit Mr.Srinivasa, Scientist, Transmission through INSAT System. A Video on the launching of Chandrayana 1 was also projected. They also visited the satellite museum.

The center also supports the ideas and thoughts of students from various colleges in the development of satellites. One such satellite developed in ISAC in support of students is the IMS-2(Indian Mini Satellite). They also gave a live demonstration on the current project of

ISRO, gave a demo on TV Signal the ISAC, PSLV 3, which is scheduled to be launched on October 2016.

> They also updated the students on their future projects Chandrayan 2, which will be launched in the year 2018. The specialty of this rocket is that there will be robots to examine the surface of the moon. Students got an insight into the Indian Space Programme, space research and the various applications of the satellites.

A visit to Indian Institute of Sciences



V Sem and III Sem students of BCA visited IISC campus on 29th July 2016. .The students visited the Supercomputer Education and Research Centre (SERC), the country's leading computing Centre having the state-of-the art

computing facilities, catering to the everincreasing demands of high performance computing for scientific and engineering research. The supercomputing facility at SERC is a symbiosis of computing, network, graphics, and visualization. The Centre housing state-of-the-art computing systems, with sophisticated software packages, is conceived of as a functionally distributed supercomputing environment, and connected by a powerful high- speed network. Computational abilities have been tested with promising results. An entire landing them to pursue higher goals.

sequence of a high-lift wing was simulated using complex physics, and so was the overlap of supernovae forming a hot over pressured bubble. The system will help scientists in complex weather climate modeling, molecular and materials research and aerospace engineering. Every field has computational problems, so not a single field can be left out. The visit helped the students to know about the state of the art infrastructure available in the country for research in science and the inspired

Visit to Analog & Digital Devices



Department of Computer Science has organized a one day industrial visit for I, III and V Sem Electronics students on July 18th 2016 to Analog and Digital devices located in Abbeger near BEL

Analog & Digital Devices is the leading manufacturers and suppliers of all kinds of Process control instruments, Measuring & Testing Equipment. Students were allowed inside the

production unit of the company in a batch of 10 students. Production Engineer Mr. Sairaj explained about the manufacturing of various equipment's including Dual power supply, Digital trainer kit, TV trainer kit and LCD circuit .By the visit the Students got to see the manufacturing of electronics equipments and got an insight to about how to start small scale industries.

Computer Literacy Program



Computer literacy program is a social outreach program where the students of computer science department visit the nearby Government schools and teach basic concepts of Computers to the school children. They conduct theory

and practical sessions to the school children. This year 24 students of BCA and B. Sc. visited three different schools on 14th December 2016 and 15th December 2016 and conducted the program. They carried out the program in Government Higher primary school, Kyalasanahalli Bangalore, Government Higher primary School, Kothanur, Bangalore and Government Lower primary School, K.Narayanapura, Bangalore

The students took class for the lower primary and higher primary government school students and taught the basic knowledge about computers they also had a practical session on the topics Windows operating system, Data

storage and moving file transfer procedure, MS Paint, MS-word and MS-power point. In response to the last year feedback from the school, the students of our college also taught the basic mathematics, science and English

The head of the institution gave feedback about the conduct of the program and they were happy and satisfied by the way the program was organized and executed. They also felt that these types of programs will help the young children to learn computers and will encourage them to take up their further studies in computers.

Highlights

Technical Community



Technical Community is one among the various activities conducted under the aegis of this club to foster the innate talents and abilities of students in co-curricular areas. Each student is required to be part of one technical community. Two faculty members are assigned to supervise the activities of each community. Student coordinators plan

and organize the proceedings. Technical community is a platform where students come together in their area of interest to share their ideas, knowledge and to explore new horizons in their respective area. Students enrolled in the various technical communities to explore wider horizons of knowledge. The communities are Coding and debugging to develop logical thinking and programming ability, Web designingto develop various skills and disciplines in the creation and maintenance of websites, IT Manager to improve aptitude, stress management and interview skills, to develop a professional approach suited to the role of an IT Manager. IT Quiz to update knowledge

current technology in the IT domain, Lecture/Presentation to plan, organize and deliver technical presentations effectively. Mathematicss to sharpen mathematical and logical ability by solving various problems and puzzles, Statistics to develop inferential techniques using statistical methods, Electronics to apply knowledge of design and construction of electronic circuits to solve practical problems.and Event management to develop organizing and leadership skills. Meetings of the technical communities were organized regularly and students explored their area of interest adopting peer to peer learning.

Innovative Club

The innovative club aims to foster innovation in the young minds of the students by providing them opportunity to do projects as diverse as robotics and animated games pertaining to the fields of Mathematics, Statistics, Electronics and Computer Science. Galaxia is the Intra College Science Project Exhibition which offers the passionate a stage to display what they find fascinating



XACTITUDE





Department of Computer Science organized XACTITUDE 2K16 a two day inter collegiate IT fest in order to provide a platform for students to showcase their potentials, develop leadership qualities and team work. The fest was organized for the students of BCA and BSc (CSMS/CSME) from all over the nation to provide a platform to participate and showcase their intelligence and creativity in myriad facets of information technology. The fest was well organized under the able guidance of Faculty Coordinators Mr.Ramanathan and Ms. Mary Jacob and the leadership of student coordinators Mr. Akhil M S (VI BCA A) and Ms.Rohini (VI BSc-CSMS).330 students from 40 colleges from various states participated in the fest. . There were 15 events conducted. The following competitions were conducted as part of the fest: IT Manager,IT Quiz, Lecture Contest, Web Designing, Stat Event, Electronics EventCoding & Debugging, Treasure Hunt, Photoshop War.Math Event. Exhibit Contest, Movie Making, Best Tech Team, Gaming and

Pick and Speak. All the above events were IT Industry and the need to do a quality well planned, organized and conducted by respective staff and student coordinators. The 11 committees were formed to ensure the effective conduct of the fest:The inaugural function took place on 4th February, 2016, in the Saint Kuriokose Elias Chavara Auditorium. Rev.Fr. Josekutty P D, the Principal of the college insisted that the fest should be an initiation process of social networking of the students of a particular interest in computer domain and spoke on the technology advance happening these days. The Chief Guest for the function was Shri. Nagaraj N Murthy, Director & Head - Software, Moog India Technology Centre Private Limited. He spoke about the emerging technologies in



job in IT domain. He told that Determination, Hard work and Dedication are the three things essential to succeed. He advised the students to learn the basics to excel in their lives and career. The valedictory function took place at 3.15 PM in the Saint Kuriokose Elias Chavara Auditorium. Mr. Tanvir Singh, India Campus Leader, Ernst and Young was the chief guest for the function. He spoke on the importance of skills and communication for an IT professional in industry. Fr.Augustine George, Vice Principal of the college appreciated the effort of the staff and students in making Xactitude 2K16 a grand success. He also spoke about the importance of moving ahead with the technology. The award for the Star of Xactitude was won by a student from St. Aloysius College. Presidency College, Bangalore bagged overall championship of Xactitude 2016. Truly the fest was a great learning experience for the students.

GALAXIA



Galaxia the science exhibition was oraganised on 4th and 5th of February 2016. The exhibits were from the field of Computer Science, Electronics, Statistics, Mathematics and interactive Projects. Our students exhibited their talents in this exhibition. This exhibition created a platform for understanding latest technology and innovation in the respective fields. The exhibition was inaugurated by Mr.Nagaraj N

Murthy, Director & Head-software, Moog India Technology, Centre private Limited, Bangalore. A total of 125 projects were showcased which includes 17 projects in Electronics, 22 in Statistics, 11 from Mathematics and 40 in Computer Science &35 interactive projects. Many interesting projects were displayed in which Quad Copter & Holographic illusion project was the main focus of attention during the exhibition. Voice activated Home automation, line follower robot, rapid interface navigator, ATM transaction, maths in GPS, mathematical Fallacies, assigning crew on an aircraft, probability were some of

categorized and judged in five different subjects. The winners of Galaxia were awarded by cash prize at the valedictory function of Xactitude on 5th Feb 2016. The

the interesting projects. The projects were number of visitors for Galaxia- 2K16 were 925.Galaxia provided a platform for the students to explore and innovate in their respective domain.

Laurels

Jayantians won laurels in the intercollegiate fests organized by the following colleges.

Composite 2K16 - St. Aloysius College, Mangalore

Nova Cest '16 - Sri Krishna Adithya College of Arts and Science Kovaipudur, Coimbatore

IT Fiesta 2016 - Acharya Institute of Graduate Studies, Soldevanahalli, Bengaluru

Mantech 2016 - CMR Institute of Management Studies, Bengaluru

Trigger 2K16 - MES Degree College Of Arts ,Commerce & Science, Bengaluru

Softtex 2016 - Christ University, Bengaluru

Incogmito 2016 - Seshadripuram College, Seshadripuram, Bengaluru

Shock-2016 - St. Joseph College (Autonomous), Bengaluru

Vijnan 2016 - Vijaya college R.V Road, Basavanagudi, Bengaluru

Celestra 2k16 - Seshadripuram First garde college, Yelahanka new town, Bengaluru

Computantra 2016 - Department of computer science, Presidency college, Bengaluru

Convergence 2016 - Department of Mathematics Christ University, Bengaluru

Circuit 2016 - Department of Electronics, Christ University, Bengaluru

Inference 2016 - Department of Statistics, Christ University

Interface V20 - Department of Computer Science, Christ University, Bengaluru Crazy Techies 2016 - St. George Gollege, Bengaluru







Faculty Publications



Ms. Kalaiselvi K published an article on Enchanced AES Crptosystem by using genetic algorithm and neural network in S-box, IEEE Xplore - (International conference on current trends in advance computing (ICCTAC) 15 09 2016 -ISBN NO. 978-1-5090-1936-

Ms. Gopika S published an article on Computer aided diagnostic scheme for brain tumor detection in mrimages using wavelets & neural networks in International Journal of Advanced Research, Volume 4, Issue 7, 1804-1810,ISSN 2320-5407

Ms. Ranjitha M published an article on



Extraction and dimensionality reduction of features for Renal Calculi detection and artifact differentiation from segmented ultrasound kidney

images, IEEE Xplore Digital Library, 31/10/2016,ISBN: 978-9-3805-4421-2

Ms. Manasa Manjunath M published an



article on A Study On Green IT Solutions in IJIRCCE(International Journal of Innovative Research in Computer and Communication Engineering)

, ISSN(Online): 2320-9801 ISSN (Print): 2320-9798,



Ms. Ayshwarya B published an article on Classification of Lung Cancer using weka tool, National Conference on Transforming india through

Digital Innovation, Guru Shree Shantivijai Jain College for Women, Chennai.



Dr. Anthony Vincent published an article on Upgrading Business Intelligence(BI) to elevate International Import & Export system to sustain in global market: An Empirical

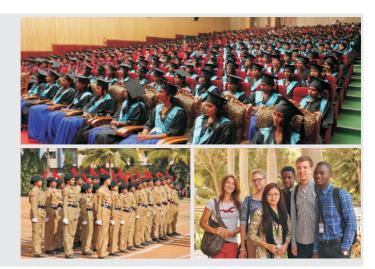
E-Business Modelling for Dynamic Growth in International Journal of Innovative Research in Science Engineering and Technology. Vol.5, Issue 11, November 2016 ISSN (online) 2319-8753



Why Kristu Jayanti College?

the most preferred educational destination in Bangalore

- An Institution managed by CMI Fathers
- An Autonomous College under Bangalore University
- Reaccredited with 'A' Grade by NAAC
- Awarded the title, 'Best College in South India' by ASSOCHAM Higher Education Summit & National Excellence Award 2016
- Management College of the year 2015 Award by Higher Education Review





STATE OF ART INFRASTRUCTURE

- Wi-fi connectivity and smart class rooms
- Cutting edge labs
- Multi cuisine cafeteria
- Library with over 50000 books and over 250 journals
- Separate Hostel for Boys and Girls
- Multi speciality gym facility
- Campus Management Solution to monitor the performance of student

OTHER FEATURES

- Students studying from over 23 countries
- Exposure to partner universities in France, Germany, US, Canada & Japan
- Campus placement offered by over 70 corporate recruiters
- Interaction with Global and Indian Visionaries
- Village exposure programmes for social sensitization
- Training in Sports, Theatre, Dance, Music (Eastern & Western)



TOP RECRUITERS













































Photo Gallery



















Kristu Jayanti College Autonomous

K. Narayanapura, Kothanur P.O., Bengaluru-560 077, Karnataka, India. Tel: 080-28465611, 28465353, 28465770, Fax: 080-28445161 | E-mail: info@kristujayanti.com | www.kristujayanti.edu.in

Editorial Board

Chief Editors:

Fr. Josekutty P.D., CMI Principal

Fr. Augustine George, CMI Vice-Principal

Fr. Lijo P. Thomas, CMI

HoD, Computer Science

Staff Editors:

Ms. Gopika S Ms. Anita C

Creative Editor

Mr. Sachin Mohandas