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VIBRANCE

October-December 2016, Vol. 9, Issue 4

Quarterly E-Newsletter of Dept. of I.T, I.T.S, Mohan Nagar, Ghaziabad

In this Issue!

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Three Things about Data Science You Won't Find In the Books

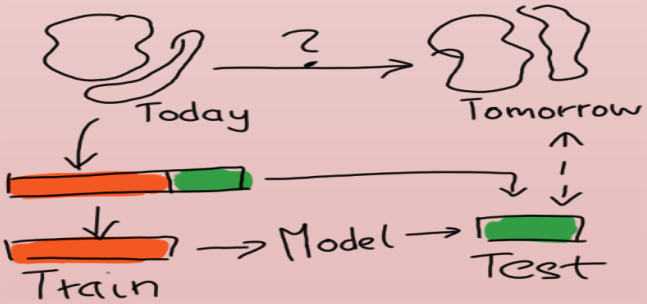
Data science is an interdisciplinary field about processes and systems to extract knowledge or insights from data in various forms, either structured or unstructured, which is a continuation of some of the data analysis fields such as statistics, machine learning, data mining, and predictive analytics, similar to Knowledge Discovery in Databases. So here are three main insights you won't easily find in books.

1. Evaluation Is Key

The main goal in data analysis/machine learning/data science (or however you want to call is), is to build a system which will perform well on future data. The distinction between supervised (like classification) and unsupervised learning (like clustering) makes it hard to talk about what this means in general, but in any case you will usually have some data set collected on which you build and design your method. But eventually you want to apply the method to future data, and you want to be sure that the method works well and produces the same kind of results you have seen on your original data set.

A mistake often done by beginners is to just look at the performance on the available data and then assume that it will work just as well on future data. Unfortunately that is seldom the case. Let's just talk about supervised learning for now, where the task is to predict some outputs based on your inputs, for example, classify emails into spam and non-spam. If you only consider the training data, then it's very easy for a machine to return perfect predictions just by memorizing everything. Actually, this isn't that uncommon even for humans. Remember when you were memorizing words in a foreign language and you had to make sure that you were testing the words out of order, because otherwise your brain would just memorize the words based on their order? Machines with their massive capacity for storing and retrieving large amounts of data can do the same thing easily. This leads to *overfitting*, and lack of *generalization*.

So the proper way to evaluate is to simulate the effect that you have future data by splitting the data, training on one part and then predicting on the other part. Usually, the training part is larger, and this procedure is also iterated several times in order to get a few numbers to see how stable the method is. The resulting procedure is called *cross-validation*.



In order to simulate performance on future data, you split the available data in two parts, train on one part, and use the other only for evaluation.

Still, a lot can go wrong, especially when the data is non-stationary, that is, the underlying distribution of the data is changing over time. Which often happens when you are looking at data measured in the real world. Sales figures will look quite different in January than in June. Or there is a lot of correlation between the data points, meaning that if you know one data point you already know a lot about another data point.

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2. It's All In the Feature Extraction

Learning about a new method is exciting and all, but the truth is that most complex method essentially performs the same, and that the real difference is made by the way in which raw data is turned into features used in learning.

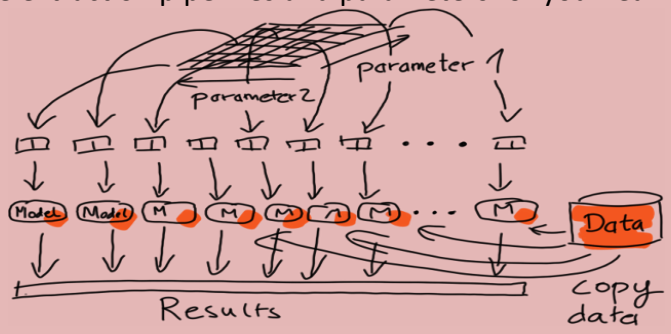
Modern learning methods are pretty powerful, easily dealing with tens of thousands of features and hundreds of thousands of data points, but the truth is that in the end, these methods are pretty dumb. Especially methods that learn a linear model (like logistic regression, or linear support vector machines) are essentially as dumb as your calculator.

They are really good at identifying the informative features given enough data, but if the information isn't in there, or not representable by a linear combination of input features, there is little they can do. They are also not able to do this kind of data reduction themselves by having "insights" about the data.

Second of all, you should learn all about feature engineering. Unfortunately, this is more of an art, and almost not covered in any of the textbooks because there is so little theory to it. Normalization will go a long way. Sometimes, features need to be taken the logarithm of. Whenever you can eliminate some degree of freedom, that is, get rid of one way in which the data can change which is irrelevant to the prediction task, you have significantly lowered the amount of data you need to train well.

3. Model Selection Burns Most Cycles, Not Data Set Sizes

Now this is something you don't want to say too loudly in the age of Big Data, but most data sets will perfectly fit into your main memory. And your methods will probably also not take too long to run on the data. But you will spend a lot of time extracting features from the raw data and running cross-validation to compare different feature extraction pipelines and parameters for your learning method.



The problem is all in the combinatorial explosion. Let's say you have just two parameters, and it takes about a minute to train your model and get a performance estimate on the hold out data set (properly evaluated as explained above). If you have five candidate values for each of the parameters, and you perform 5-fold cross-validation (splitting the data set into five parts and running the test five times, using a different part for testing in each iteration), this means that you will already do 125 runs to find out which method works well, and instead of one minute you wait about two hours.

The good message here is that this is easily parallelizable, because the different runs are entirely independent of one another. The same holds for feature extraction where you usually apply the same operation (parsing, extraction, conversion, etc.) to each data set independently, leading to something which is called "embarrassingly parallel".

Of course, there exist applications like learning global models from terabytes of log data for ad optimization, or recommendation for millions of users.

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The Simple, Elegant Algorithm That Makes Google Maps Possible

Algorithms are a science of cleverness. A natural manifestation of logical reasoning, mathematical induction, in particular a good algorithm is like a fleeting, damning snapshot into the very soul of a problem. A jungle of properties and relationships becomes a simple recurrence relation, a single-line recursive step producing boundless chaos and complexity. And to see through deep complexity, it takes cleverness.

It was the programming pioneer Edsger W. Dijkstra that really figured this out, and his namesake algorithm remains one of the cleverest things in computer science. A relentless advocate of simplicity and elegance in mathematics, he more or less believed that every complicated problem had an accessible ground floor, a way in, and math was a tool to find it and exploit it.

In 1956, Dijkstra was working on the ARMAC, a parallel computing machine based at the Netherlands' Mathematical Center. It was a successor to the ARRA and ARRA II machines, which had been essentially the country's first computers. His job was programming the thing, and once ARMAC was ready for its first public unveiling after two years of concerted effort Dijkstra needed a problem to solve.

"What's the shortest way to travel from Rotterdam to Groningen?," Dijkstra said. "It is the algorithm for the shortest path, which I designed in about 20 minutes."

Google Maps does this for us now and we don't even really think about what a complex task it could be. Shortest path problems, a key feature of graph theory with a whole lot of pretty obvious real-world applications, get insanely deep very fast. The result is known (informally) as a combinatorial explosion, which is where the number of different combinations that must be explored in a given problem grows exponentially.

The result of such an explosion is that problems, like shortest path problems, grow so quickly as to become practically incomputable, taking a practically infinite amount of time to solve. It only takes a handful of nodes in a given map or graph for the number of possible combinations to push into the billions, requiring vast and unreasonable amounts of time.

The easiest way to explain Dijkstra's algorithm is probably with an example. Take the graph below, where the numbers given are the weights of each connection. (A weight could be a simple distance or really any relative cost associated with traversing a particular connection that we're seeking to minimize.)

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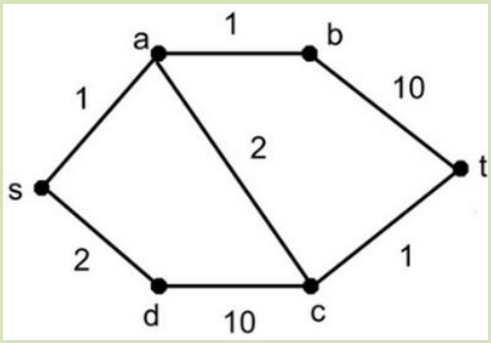
To start, we assign *s*, our starting position, the value 0. It takes 0 miles (or whatever) to get here because it's the beginning position. Next, we look at the neighboring nodes of *s*, which we can imagine as a sort of frontier to be explored.



In the first iteration, we look to the closest node, which is 1 unit away. We assign a label to the node with that value, *a*, and look onward at the next frontier nodes and their respective distances. *b* is 1 away (2 from the beginning), *c* is 2 away (3 from the beginning), and we also have *d*, which is 2 from the beginning. Since we're after the shortest path *from the beginning*, we're forced to move to *d* from s (2 units), and we assign a value of 2 to *d*.

On the next iteration of the algorithm, from *d* we look ahead to *c*, which is 10 away (12 from *s*), but we also look again from our outpost at *a*, where we can still get to *c* in 2 (3 from the beginning) and b in 1 (2 from the beginning). We set up our next outpost at *b* and assign it a label of 2 (2 moves from the start).

Our explorer stationed at *b* is in for a disappointment. The only possible move to *t* is 10 units away (12 from the beginning). And this is more than the 2 units from *a* to *c* (3 from the beginning) and the same as a trip from *s* to *c* through *d*, a possibility we can now safely discard (having arrived at *c* in only 3 units, rather than the 12 required via *d*). Now, we're at *c* and if this seems complicated it's really not. We're just making cautious, tentative steps from node to node, while being forced by the algorithm to always consider the shortest path from the start.

Finally, we again look from *b* to *t*, again noting the total path as being 12. Meanwhile, the final jump from *c* costs 1, for a total shortest path distance of 4. And so an incredibly complex—explosively complex—problem can be accomplished elegantly, simply, and even intuitively on paper.

This is what makes Google Maps go 'round, or at least some variation of it is. Really, it's what makes such route-finding possible at all: just enough cleverness to see through the noise.

Happening @ Department of I.T during October-December, 2016

Workshop on Big Data and Hadoop for MCA Students

Dot Net Club conducted two days Workshop on "Big Data and Hadoop" on 1st Oct, 2016 and 4th October, 2016. Prof. Abhay Kumar Ray, and Prof. Rakesh Roshan were the resource persons. This workshop was focused towards making the students aware & sharpening the skills about the Big data and hadoop. The workshop covered the topics like Introduction to Big Data and Apache Hadoop, Application of Big data in different areas of business, architecture of Hadoop and working of its components, Installation of Linux virtual Machine and Hadoop application, Basic commands of Linux , HDFS commands , Map reduce process architecture and its features , Execution of java program under Linux environment , Execution of JAR file under Hadoop environment (Under Mapreduce processing) , Introduction to Hive, Feature of Hive, Introduction to HQL ,Difference between HQL and SQL, Basic commands of HQL , Demonstration of Hive commands like Create database , Create table , Loading the structured data into Hive table ,select command , Joins , Basic Arithmetic operations in HQL etc., Introduction to Apache Pig and Pig Latin, Difference between Hive and Pig, Basic statements of Pig, Loading of Structured, Semi-Structure ,unstructured data into pig variables and Demonstration of Pig Latin statement using small examples.

Workshop on Data Science and Applications for MCA Students

Department of IT organized one day workshop on "Data Science and Applications" for the students of MCA-III Semester on 5th October, 2016. The objective of this session was to make our students aware about the data

science and its various applications. We also want to make them aware about the various future opportunities available in this domain. Mr. Deepak Bagchi, Head-Smart Data, IOT & Enterprise Analyst, SLK Software Service Ltd., Banglore was a keynote speaker for this session.

While addressing the students, Mr. Bagchi said that by leveraging big data & analytics, businesses create the potential to better understand, manage, and strategically exploiting the complex dynamics of customer behavior. It reveals how to tap into the powerful tool of data analytics to create a strategic advantage and identify new business opportunities. He also said that Big Data is more than a decade old term that became very popular recently in life sciences and other fields.

While addressing the students he also mentioned that if they are at a large company with huge amounts of data, or working at a company where the product itself is especially data-driven, it may be the case that they may want to be familiar with machine learning methods. This can mean things like k-nearest neighbors, random forests, ensemble methods, the entire machine learning buzzwords. It's true that a lot of these techniques can be implemented using R or Python libraries – because of this, it's not necessarily a deal breaker if you are not the world's leading expert on how the algorithms work. More important is to understand the broad strokes and really understand when it is appropriate to use different techniques. It was an interactive and informative session.

Workshop on Python for MCA & BCA Students

Department of I.T. organized one day Workshop on "Python" on 6th October, 2016 for the students of MCA second year .Prof. Rakesh Roshan was the resource person for this workshop. This workshop was focused towards making the students aware & sharpening their skills about the Python Programming Language, which has highly demand in market. This workshop covered the topics like Algorithms and Information Processing, Control Structures, Boolean logic and Numeric Data Types, variables, Strings, Text Files, Lists, Dictionaries, Procedural Abstraction in Function, Module,File Handling and Exception Handling.
At the end of workshop, online quiz was conducted for the students. All students successfully completed the quiz with good score.

Special session on "Relational Algebra to PL/SQL"

DBMS Club conducted a special session on "Relational Algebra to PL/SQL" for MCA students on 22nd October 2016. In the first session Prof. Saurabh Saxena covered relational Algebra. In his session he described the objective of relational Algebra in DBMS & very well explained each operator of relational algebra with example. He discussed about how to write query in relation algebra. At the end of 1st session, students performed hands on exercise on the queries of relational algebra.

In the second session Prof. Puja Dhar touched the various topics of PL/SQL like cursor, trigger & procedure. This session was planned with an objective that students are able to write procedure in PL/SQL & know the concept of trigger & Cursor. She explained each topic with variety of examples. Overall the session was very interactive & informative for students.

Special Session on "Modern Trends in Technologies" by Mr. V.K.Arya, Founder & CEO - AVK Global & Former Dy. Director General (TEC), Govt of India

Department of IT organized an invited talk by Eminent Speaker,Mr. V. K. Arya, Founder & CEO - AVK Global & Former Dy. Director General (TEC), Govt of India on 22nd October ,2016. In this session, Mr. V. K. Arya delivered talk on "Modern Trends in Technologies". In his address, he explained about Modern Trends in IT based Technologies. He explained trends in Information Technologies. He discussed that Growth in Broadband is driven by Intensive Applications like Telemedicine, Distance Education, E-Governance, E-Commerce, HDTV and Online Gaming. Mr. Arya has suggested to students that there is need to concentrate on all basic fundamental of technologies.

Mr. Arya enlightened on Internet of Things, Cloud Computing, Data Analytics and its applications in different real life Applications.

This event was in the series of Invited talks by national speakers of repute by Department of IT with an objective to provide the detailed insight of the theme to the upcoming and working professionals/students/researchers about the technological, research and allied issues and experience sharing by leading experts and professionals. Mr Arya also interacted with the faculties and answered the queries related with research & applications raised during the session.

Mr Alok Chaurasia, Associate Director, Cognizant, Belgium conducted a Special Session on "Business Analytics"

A special session on "Business Analytics" was conducted by Department of IT, I.T.S, Mohan Nagar, Ghaziabad on 5th November, 2016 for MCA Students. Mr Alok Chaurasia, Associate Director, Cognizant, Belgium was invited as resource person for the special session. Mr. Alok shared his experience on Business Analytics. He said that it can be used to automate and optimize business processes. He told that companies treat their data as a corporate asset and leverage it for competitive benefits.

He discussed about new pattern and role identification techniques which are rapid using in data analysis. He told about an importance of this approach in the current scenario. He discussed about working of statistical analysis and quantitative analysis. He exposed how Data Analysis is used in real life situations and time taken to trace the privileges provided to the user. He discussed about the solutions against the problem of data filtration for different scenarios.

Towards the end of the session Mr. Chaurasia discussed the questions related to business analytics and its issues which may be beneficial for students for their better understanding. The session was very interactive and all the students were benefitted towards their knowledge in the domain of Business Analytics by attending such interactive session. Faculty members of the department were also present during the lecture.

Grand Finale of SAMVAD-2016

Grand finale of "SAMVAD-2016 (5th group discussion initiative) was concluded on 14th November, 2016.Semester long activity was started on 28th August, 2016 where MCA students participated with full zeal and enthusiasm. They debated on social, political and economical issues. The main aim of the activity is to sharpen the debating and communicative skills. It was the 5th series of SAMVAD which declared the winners on the given parameters.

International Conference on Computer Systems & Mathematical Sciences

Institute of Technology & Science, Mohan Nagar, Ghaziabad organized Two Days International Conference on “Computer Systems & Mathematical Sciences (ICCSMS-2016)” on 18th-19th November, 2016. The Conference was Sponsored/ Technically Supported by Computer Society of India, Dept. of Science & Technology, Govt. of India, Bank of Baroda, ISACA, International Journal of Computer Applications, USA and International Transactions in Mathematical Sciences & Computer.

On Day-1, Eminent Speakers including Shri Anil Swarup, Secretary to Govt. of India, Ministry of Coal & an IAS Officer of 1981 Batch known for his contribution in Ministry of Coal & brain behind reforms in Coal Block Allotment through e-Auction process, Founder Vice Chancellor of GGSIP University, Delhi - Prof. K.K. Aggarwal, Renowned Smart Cities & E-Governance Expert - Shri Shushovon Saha and Prof. Frank Bond from Goldsmith University of London, London addressed the gathering during the inaugural Session. Thereafter parallel Paper Presentations were organized.

On Day-2: Shri M.S. Vilkhu, Chief of Information Security & Head Airtel Africa, Shri Nafees Ahmed - Group CIO Indiabulls Group, Shri Ajay Shrivastava - CTO of OYO Rooms, Prof. MN Hoda, National Chairman - CSI Div-I, Prof. Sanjay Tanwani, Professor & Head - School of Computer Science, Devi Ahilyabai University, Indore, Shri. Praveen Pipara, General Manager at SOPRA Group and other eminent Guests addressed the gathering during the two days of this International Conference.

During the conference, the gathering of the Conference was also addressed by renowned guests & experts through video conferencing. These included : Shri Ajay Kumar, Regional MD, Asia Pacific, Entrusted Datacard(Singapore), Shri S. Sridhar, Vice President, HCL Insys, Singapore, Shri Renato De Castro, Executive Director, Bouman Consultany, Padova, Itlay, Shri. Pavan Malladi, CIO, Dhiraagu Telecom, Bahrain,Shri Pankaj Gupta, General Manager, PSE, Washington, Mr. Gautam Hazari, Worldwide Technical Director - GSMA (Heading 5G Project). In addition to above Parallel Paper Presentation Sessions were organized on both the days in which Research paper Contributors presented their papers. These sessions were addressed by seasoned academicians.

On Day-2 of the Conference, In afternoon, parallel Paper Presentation Sessions were scheduled in which Research Scholars, faculty members and students presented their Papers which were assessed & evaluated by Team of Session Chairs & Co-Chairs and based on their recommendations Best Paper Awards were given. Best Paper Award ws given to Dr. K.N. Mishra from BIT - MESRA, Dr. S.C. Pandey, BIT MESRA and Dr. Sanjay Singh from Gurukul Kangri University, Haridwar, Uttrakhand.

The Conference was concluded with a grand success witnessing participation of International Guests, Delegates, large number of delegates, Research Scholars and students of UG & PG Programs.

SANASMARAN-2016-The I.T.S, Alumni Meet on 3rd December, 2016

SANSMARAN – 2016, The I.T.S Alumni Meet, of our Institute for IT Courses was organized on Saturday, 3rd December, 2016 at I.T.S, Mohan Nagar, Ghaziabad Campus. The Alumni Meet – 2016, was formally inaugurated by lamp lighting by Shri. Arpit Chadha, Honorable Vice Chairman – I.T.S The Education Group, Dr. A.K. Puri – Director General, I.T.S, Mohan Nagar, Ghaziabad and Dr. Vineet Kansal – Director, I.T.S Engineering College. On this occasion Dr. Sunil Kr Pandey – Chairperson Alumni & Director (IT) of I.T.S, Mohan Nagar, Ghaziabad, Director (UG Campus) – Dr. Vidya Sekhri and Vice Principal (UG Campus) – Dr. S. Bhattacharya were also present.

Director General, I.T.S, Ghaziabad in his address welcomed the Alumni and expressed her happiness over large participation of Alumni in Alumni Meet.

Vice Chairman - I.T.S The Education Group, Shri Arpit Chadha, while addressing the gathering welcomed the Alumni and said that Alumni Meet is an event where our Alumni get an opportunity and refresh old memories at institute, to meet their own batch mates, to their juniors and above all to visit their institute from where they started their professional journey of their career.

This year the experience sharing by Alumni of Senior Batches was also introduced, on the advice of Honorable Vice Chairman Sir. Some of the Alumni of senior batches of MCA, MIS and BCA shared their experience and addressed the gathering. It was well taken and appreciated by Alumni.

In his address, the Director (IT) & Chairperson – Alumni said that every year increased number of participation of Alumni from various courses in such meets shows the love, affection and strong emotional bonding between Institute and it's passed out students.

With an objective of bringing our old students back to institute and provide them a platform for reviving old memories at the institute, meeting with their faculty members & own classmates, sharing and exchanging views,

ideas and experiences. Every year increased participation of alumni from all the batches from all the courses of the institute is evidence to the emotional attachment and connects of the students with the institute. The uniqueness of this year's meet was the presence of alumni from all the batches of various courses of the institute, who came to institute after 14 or 16 years after they passed out from institute.

Prof. San Murugesen, Western Sydney University, Australia @ I.T.S for Faculty Research Development

Department of I.T organized an invited talk by famous renowned Adjunct Professor, Prof. San Murugesen, Western Sydney University, Australia, on 7th December,2016 .

In this session, Prof. San Murugesan delivered talk on "Perspective of Research Issues & Publications". He has discussed about "issues in research publications" and also focused on "How to write research papers" in journal/magazine/letters repute. This was a completely interactive & knowledge enriching session in which Prof. San addressed the queries, concerns and issues of faculty members. During this session relevant issues were answered & addressed like Opportunities for Publications and their scope, Differentiating the requirements of publications for Journals, Magazines, Letters, Book Chapters, How to frame & structure a Quality Research Paper, Why Title of Papers and Abstracts are important ,Why in most cases, Papers are rejected even before initial review, What are the factors considered while selecting a paper by a reviewer in any standard good journal, Significance of Impact Factor, its objective and does it really matter? Research work should be taken up further to validate its Practicality

Mr. Vitaly, CEO, Caipos and Mr. Amitabh Verma, Director India, Caipos @ I.T.S, Mohan Nagar for a special session on " Research Development on Wireless Networks, Industrial Automation and Internet of Things"

In the series of distinguished talk by renowned speakers from industry, an invited talk by Mr. Vitaly, CEO, Caipos Austria was organized on 10th December, 2016 by Department of I.T.

In this session, Mr. Vitaly delivered talk on "Wireless Communications, Industrial Automation and Internet of Things". He has discussed on different dimension of Applications of IT, in Agriculture. This was a completely

interactive & knowledge enriching session in which Mr. Vitaly addressed the queries, concerns and issues of faculty members. During this session relevant issues were answered & addressed like Current Situation of Agriculture in India, Enhancement in Traditional Agriculture by incorporating latest Technologies, IoT based System , Composition Country wise Quality of Product Survey and many more.

On 14th December, 2016 a renowned Computer Scientist and one of the pioneers in the field of data structures, Prof Sartaj K. Sahni at I.T.S Mohan Nagar, Ghaziabad

Prof. Sartaj K. Sahni, famous honorary and distinguished professor from University of Florida, USA, has delivered an invited talk on 14th December, 2016, at I.T.S, Mohan Nagar, Ghaziabad. In this session, pioneer of data structures & Computer Scientist Prof. Sartaj K. Sahani delivered talk on “Dimensions of Data Structures & Algorithms”.

In his address, he explained the concept of Time and energy efficient computing and importance of energy conservations. Prof. Sartaj K. Sahni enlightened on the impact of energy efficient computing in information technology, evaluation of system performance along with time and energy metrics, involvement of super computers into these computing techniques, top 5 well established super computers, K Computers, Tianhe-1A, Jaguar, Ncubulae, Tsubane 2.0 , single core, multicore architechture, gaming industry, GPU, multithreaded programming, cache matrix multiplication.

He provided a detailed insight with his recent research and latest technique - Matrix Multiplication on GPUs. He also explained the method for effective programming by using example of matrix multiplication in terms of less

memory consumption. He described that legacy single core codes will need to be rewritten to benefit from future advances in computer architecture and GPU performance can be increased if we do programming with millions of threads.

Mr. Pankaj Gupta, (DBWI & DBA), Head – IT Infrastructure & Services, Puget Sound Energy, Bellevue, Washington, USA, for a special session @ I.T.S, Mohan Nagar

On 15th December, 2016 a Session on "Understanding Data Temperature & Analytics" was organized for the faculty members of Department of IT. Mr. Pankaj Gupta, (DBWI & DBA), Head – IT Infrastructure & Services, Puget Sound Energy, Bellevue, Washington, USA, was invited as an expert for this session.

In this session, Mr. Pankaj Gupta delivered talk on "Understanding Data Temperature & Analytics". He has discussed about Data and also focused on with focused discussion on evolution of Database, Column based data access, SAP HANA, Performance issues, Memory Access, In-Memory Databases, Optimization issues in Data Access. This was a completely interactive & knowledge enriching session.

The objective of this programme is in series of efforts to create a platform for faculty members to meet, listen & interact with the practicing professionals and share the implementation issues, latest trends & advancements in the field of Database Technology and experts, who have contributed immensely in the domain of computer science & IT.

Towards the end of the session, Dr Sunil Kr. Pandey, Director - IT, I.T.S Ghaziabad delivered vote of thanks to Mr. Pankaj Gupta. While interacting with faculty members of IT Department, Mr. Pankaj Gupta demonstrated & addressed the queries raised during the session.

Special session by Mr. Ashish Bhatia UI Architect, Cognizant, Austin, Texas, USA for IT Faculties

A Faculty Interaction by MCA Alumni ,Mr. Ashish Bhatia (1998-2001), UI Architect, Cognizant, Austin, Texas, USA was organized on 16th December, 2016 at I.T.S, Mohan Nagar, Ghaziabad. In this session, Mr. Ashish Bhatia delivered talk on "UI Technologies and Angular JS". He has discussed about Angular JS and also focused on Node JS, React JS, Web Services and Agile Methodologies. The objective of this programme is in series of efforts to create a platform for faculty members to meet, listen & interact with the visionaries and experts who have contributed immensely in the domain of computer science & IT.

Dr Sunil Kr. Pandey, Director-IT, I.T.S Ghaziabad delivered vote of thanks to Mr. Ashish. Mr. Ashish Bhatia also interacted with faculties and answered the queries raised during the session.
It was a wonderful experience to have MCA Alumni Mr. Ashish Bhatia at the Institute (I.T.S, Mohan Nagar, Ghaziabad) after about 15 Years and visit the infrastructure and facilities.

During the interaction he shared his experience in the Industry and developments trends. He was overwhelmed and happy to see the growth of the Institute. This was a completely interactive & knowledge enriching session.

Faculty Participation in External Events

Date	Faculty	Events
8th October, 2016	Prof. Puja Dhar	Attended on day seminar on "Digital India: Technology Trends & Challenges at IPEM, Ghaziabad
20th October 2016	Prof. Rakesh Roshan	Conducted workshop on "Python Proramming language at Mewar College, Ghaziabad on
2nd November, 2016	Dr. Sunil Kr. Pandey (Director-IT), Prof. Puja Dhar, Dr. Vidushi Singh, Prof. Smita Kansal, Prof. Rakesh Roshan, Prof. Varun Arora and Ms. Babita Kapila	Attended an international conference on "India Telecom-2016, Transforming India" at Hotel Le-Meridian, New Delhi.
3rd November, 2016	Dr. Sunil Kr. Pandey (Director-IT), Prof. Puja Dhar and Prof. Rakesh Roshan	Attended felicitation ceremony of students at Syndicate Bank, Ghaziabad
11th November 2016	Dr. S.K. Pandey, Prof. Puja Dhar and Ms. Babita	Attended "Digital Edge ICT conclave on Education 2016
2nd December, 2016	Prof. Rakesh Roshan, Prof. Abhay Ray , Prof. Smita Kansal, Prof. Vidushi Singh, Prof. K. P. Singh and Prof. Varun Arora	Attended training on digital evaluation at AKGEC – Ghaziabad organized by AKTU Lucknow

Student Participation in External Events

Date	Student Name	Events
2nd November, 2016	34 MCA students of MCA-2nd year	Attended an international conference on "India Telecom-2016, Transforming India" at Hotel Le-Meridian, New Delhi
3rd November, 2016	Ms. Anupriya Pathak & Ms. Akanksha of MCA-III Semester	Attended felicitation ceremony at Syndicate Bank on the celebration of Vigilance Awareness Week and had organized Essay Writing Competition in promoting "integrity and eradicating corruption" in Hindi or English at I.T.S, Mohan Nagar, Ghaziabad

Announcement and Contact Details

VIBRANCE is an E-magazine of Department of I.T, I.T.S, Ghaziabad. We look forward to the contribution from our students, alumni, faculty members and industry experts.

Contributors are advised to send their contribution to our editorial team at:

Faculty Advisor:
Prof. Puja Dhar *pujadhar@its.edu.in*
Student Editor:
Abhishek Gupta abhishekgupta15_17_a_mn@its.edu.in

Wising all our readers a Happy & Prosperous Happy New Year-2017