

INSIGHT

Computer Engineering Department's Newsletter

Volume 02, Issue 02, January- June 2018

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VISION

To be recognized as a center of excellence in the field of computer engineering, engaging with and maintaining a strong association with leading organizations, nurturing professionals and entrepreneurs with a positive mind set coupled with societal concern.

MISSION

- To keep pace with the latest software and hardware development within and beyond the curriculum so as to nurture competent professionals.
- To enhance research opportunities and entrepreneurship opportunities in the department by promoting application based education and partnership with the industry.
- To foster a holistic learning ambience by inculcating professional behavior, problem solving skills, student-faculty collaboration and socio-ethical awareness.

One Week TEQIP-III, AICTE-ISTE STTP on "Research Tools and Techniques"

The Department of Computer Engineering at Don Bosco College of Engineering, Fatorda organized a One Week TEQIP – III AICTE - ISTE Short Term Training Program on " Research Tools and Techniques" from 7th May to 11th May 2018, in association with Walchand College of Engineering, Sangli, Maharashtra, India.

The Workshop began with a brief inaugural session in the presence of chief guest Dr. Dhananjay R. Dolas, Professor, Mechanical Engineering, Mahatma Gandhi Memorial Jawaharlal Nehru Engineering College, Aurangabad. Also present was the Director, Rev. Fr. Kinley D'Cruz and the Principal, Dr. Neena Panandikar, HOD-Incharge, Prof. Christina Barretto along with workshop coordinators, Prof. Manisha Faldessai and Prof. Kiran Waghmare from the Department of Computer Engineering.

The First session on Day 1, started with an Overview of Reliability Analysis Tools which was delivered by Dr. Dhananjay Dolas. He explained the statistics based approach to Design for Reliability, followed by Failure based approach. Dr. Veena Thenkanidiyoor, Associate Professor, NIT-Goa gave an elaborate and thorough introduction to Pattern Recognition. This was followed by a practical session on Matlab where she explained several essential matlab commands and operations.

Dr. Damodar Reddy, HOD and Professor, Department of Computer Science and Engineering, NIT – Goa took a session on Brain Computer Interface (BCI) followed by demonstration of a non-invasive BCI method on a volunteer using VAMP software.



On Third Day, Dr. Venkatanaresbhabu Kuppili, Assistant Professor, NIT, Goa, delivered session on Deep Neural Networks. He discussed different ways of processing neurons and gave insight into the workings of learning algorithm, example perceptron, back propagation etc. He gave hands on session on it later. Dr. Purushothama B. R., Assistant Professor, NIT-Goa took a session on LaTeX for Technical Documentation. He demonstrated the use of Texmaker, a free, modern and cross platform LaTeX editor, available for linux, macOS, and windows systems that will easily integrate many tools needed to develop documents with LaTeX.



The second half of day three, began with a field trip to the Research and Development Department at ONGC (Oil and Natural Gas Corporation Ltd) – Institute of Petroleum, Safety, Health and Environment Management (IPSHEM), Betul. Participants were given a briefing on fire safety and firefighting along with live demonstration. The participants were also allowed to view the amazing training grounds at ONGC – IPSHEM, complete with a smoke room, electrical failure and fire training room, oil rigs and fuel-tanks.

Dr. Veena Thenkanidiyoor conducted a session on SVM: A Kernel method. She re-called the pattern classification method and showed how discriminative learning method can be used to separate linearly separable classes. Miss Diana Miranda, a research scholar at NIT Goa delivered a hands on session on R programming. Participants implemented the SVM algorithm and classified the IRIS dataset using R-Software.



Dr.Suraj Rane, Professor in Mechanical Engineering, GEC dealt on Data Analysis using Minitab. He demonstrated the way to extract the statistical information like mean, standard deviation, min, max, median, skewness, kurtosis from given data, the use of scatterplots and histogram in analysis of data. Dr. Chirag Modi, Assistant Professor and TPO, Department of Computer Science and Engineering, NIT – Goa, delivered an informative session on Network security Challenges and Solutions. Participants were given insight into various tools necessary to provide network security, storage security and application security. He also stressed on the concept of block-chaining and its research challenges to detect an insider who may cause malicious activity. In the laboratory session Dr. Chirag demonstrated the installation of Encryptomatic OpenPGP and its various applications.

Dr. Anantkumar Umbarkar, Assistant Professor in Department. of Information Technology at Walchand College of Engineering, Sangli spoke about Evaluation Algorithms for Engineering Optimisation. He also gave an insight into Optimisation using Genetic Algorithms. The next session by Prof. Anil Surve was on Research Technology using IoT (Internet of Things). he decoded the term popularly used to describe the ability of machinery and other devices to “talk” to one another and send data to Information Technology systems over the web.



The event ended with the Valedictory Function, in the presence of Chief Guest, Dr S. K. Chatoupadhya,ONGC, Director,Rev.Fr.Kinley D'Cruz, Principal, Dr. Neena Panandikar, Convenor,Walchand College of Engineering Sangli, Dr. Udaykumar Dabade, HOD- Computer, Prof. Gaurang Patkar and workshop Coordinators. At the end, TEQIP-III Certificates were awarded to the Participants and also to organizing Committee for their time, effort and valuable support.

STUDENTS CORNER

WORKSHOPS/ SEMINARS/ IN-HOUSE TRAININGS

1. Two Weeks INTERNSHIP TRAINING on “Python, Raspberry PI and IOT”



The Department of Computer Engineering organized a Two Week Internship Workshop on Python, Raspberry pi and IOT. The workshop was conducted from 2nd January 2018 to 13th January 2018 in Don Bosco College of Engineering, Fatorda. The resource faculty for the workshop was Mr. Vibhav Kharangate and Mr. Shravan Hegde, Earnestek, Margao. The workshop was attended by Third Year Computer Engineering students of Don Bosco College of Engineering. The coordinator for the workshop was Prof. Kiran Waghmare.

In the first week, Mr. Vibhav Kharangate gave insight knowledge of programming language PYTHON with software called “pycharm”. Various concepts of coding such as variables, lists, sets, functions, objects and classes were covered using PYTHON programming. In the next week, Mr. Shravan Hegde started with raspberry pi hands on session. In this session, Raspberry Pi was used to control LED, various kinds of sensors and bot using PYTHON programming. They also taught IOT (Internet of Things) i.e. how to control a Raspberry Pi using a phone using MQTT protocol.

The workshop was interactive as well as hands on, with simultaneous practical sessions conducted by resource persons. The objective of this workshop was to deliver important programming skills which would be beneficial to students with regards to their future final year projects. Students were encouraged and challenged to create their own mini projects and come up with innovative project ideas.

2. Two- Days Workshop on “ Advanced SQL Commands”

The Department of Computer Engineering in association with C-CODES arranged a Workshop on SQL Commands which was held in the Computer laboratory on 27th January 2018 and 24th February 2018. The session was attended by 40 students of S.E Computers.

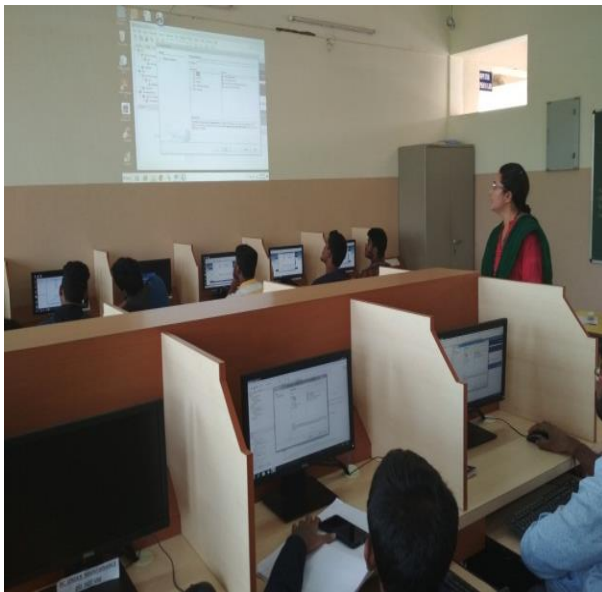
The resource person for the workshop were Prof. Merwyn D'Souza, Prof. Manisha Faldessai, Prof. Norman Dias and Prof. Sweta Morajkar who introduced the students to the basics of Php MySql database which is a standard language for storing, manipulating and retrieving data in databases. The workshop started with basics of MySql Database .



All the students were shown how to create a database. The professors explained that MySQL is a database system used on the web. The students were then introduced to the basic queries in MySQL database like INSERT, SELECT, UPDATE, DELETE. They were given time to try out the queries in different ways on the database created. It was a good experience for all the students who attended the workshop and gained new knowledge beyond the curriculum. The coordinator for the workshop was Prof. Merwyn D'Souza.



3. Workshop on “JAVA Programming”



One Day Java Workshop was organized by C-CODES on 27th January 2018 for Third Year Computer Engineering Students. Course Faculty Astd. Prof. Lilavati Samant handled practical sessions using Net Beans IDE 8.0.2. Java Basics, Loop Control, Creation of Objects & Classes, Methods, Method overloading, Different types of Inheritance, Interfaces and Java Applets were covered in the Workshop. The coordinator for the workshop was Prof. Merwyn D’Souza.

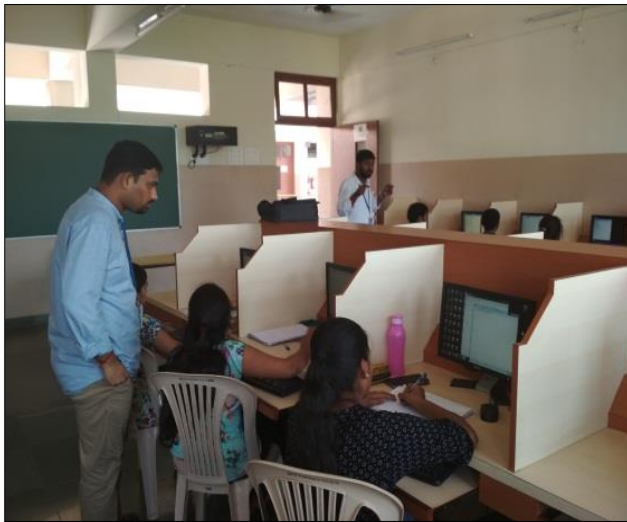
4. Workshop on “Blender”

The Department of Computer Engineering in association with C-CODES arranged a Seminar on Blender which was held in the Computer Dept Laboratory on 24th February 2018. The session was attended by 30 students of T.E Computers. The coordinators for the talk were Prof. Gaurang Patkar, Prof. Merwyn D’Souza, Prof Amey Tilve and Prof Amey Kerkar. The resource person for the lecture was Mr.Pankaj Mali who explained about Blender. Pankaj is the Alumni of Don Bosco College of Engineering Fatorda.

Mr.Pankaj introduced about Blender which is a software where one can draw, design 2D,3D objects and etc.He explained about the shortcut keys used for faster access and the system requirements required for blender. He explained how rendering,modeling is carried out and how the output looks.it was a good experience for all the students who attended the workshop and gained new knowledge beyond the curriculum. As a token of appreciation a memento was awarded to the resource persons at the hands of Prof. Gaurang Patkar -HOD Computer department.



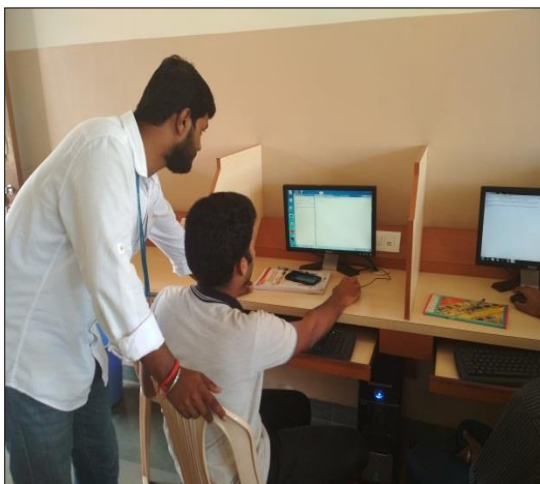
5. Workshop on “PYTHON Programming”



C-CODES Student Association along with the Computer Department organized a workshop on Python. The workshop was conducted on 24th March 2018. The resource faculties for the workshop were Prof. Amey Sinai Kerkar, and Prof. Amey Tilve. The workshop was attended by Second Year Computer Engineering students of Don Bosco College of Engineering. The coordinator for the workshop was Asst. Prof. Merwyn D’Souza.

The resource faculty gave basic knowledge of Python. Python is a widely used high-level programming language for general-purpose programming. It is very easy-to-read, easy-to-learn and easy-to-maintain. Also, it provides the user with a broad standard library. Other essential features of python are that, it is portable, scalable, extendable and enables GUI programming in a better way.

An interpreted language, Python has a design philosophy which emphasizes code readability (notably using whitespace indentation to delimit code blocks rather than curly braces or keywords), and a syntax which allows programmers to express concepts in fewer lines of code than possible in languages such as C++ or Java. It has simple easy-to-use syntax, wherein no curly braces ({ }) are required for the scope of a class or functions.



The S.E. students were exposed to Getting started, Text input and output, Variables, If statements, for loops, Classes and Functions, Lists, Tuples, Dictionary, Files, Modules, etc. using python. Also, implementation of inheritance among the classes was explained.

The students were even explained the 2 ways students for using the Python interpreter: shell mode and program mode. In shell mode, Python expressions are typed into the Python shell, and the interpreter immediately shows the result. Here the program is written as a single line of code. The workshop was interactive as well as hands on, with simultaneous practical sessions conducted by resource faculty.

EXPERT TALKS

A. Talk on “**NODE JS**” (Industry Institute Interaction) By Mr. Adnan Sayed
Founder of “**ONE STOP solutions**”, Margao Goa.



The Department of Computer Engineering in association with C-CODES arranged a Seminar on NODE JS which was held in the Computer Dept Laboratory on 24th February 2018. The session was attended by 30 students of T.E Computers. The coordinators for the talk were Prof. Gaurang Patkar, Prof. Merwyn D’Souza, Prof Amey Tilve and Prof Siya Naik. The resource person for the lecture was Mr.Adnan Sayed Founder of ONE STOP solution who explained about NodeJS . Mr.Adan introduced and explained NodeJS He started with basics of Html,Css and Javascript which are all scripting languages required for website development.all the students were explained about the languages and some hands-on sessions were Carried out. As a token of appreciation a memento was awarded to the resource person at the hands of Prof. Gaurang Patkar -HOD Computer department. The session was concluded with a vote of thanks by Prof. Merwyn D’Souza,C-Codes Coordinator.

B. Guest Lecture on “**Health ,Fitness and Nutrition**”(Industry Institute Interaction)
By Mr. Gauresh Gawas, Owner **CHAMPIONS’s GYM**

The Department of Computer Engineering in association with C-CODES arranged a Guest lecture on Health and Fitness which was held in the S.E Computer class on 10th February 2018. The session was attended by the Computer Engineering faculty and 70 students of S.E and T.E Computers. The coordinators for the talk were Prof. Gaurang Patkar and Prof.

Merwyn D'Souza. The resource person for the lecture was Mr.Gaurish who holds the Mr.Goa 2017 Title. He is the Alumni of Don Bosco College of Engineering Fatorda (2015 batch).

In his interactive session he briefed the audience on the importance of health and Fitness. He explained how to maintain proper health and fitness and elaborated on the required supplements to maintain the same, the basic Nutrients required for good health such as Proteins, Calories, Carbohydrates, Fats, Vitamins and etc. He further stated that the components required for good physical fitness are muscular strength, Endurance, Flexibility. He spoke about BMR (Basal Metabolic Rate) which is the number of calories required to keep your body functioning at rest and the formula to calculate it was explained. As a token of appreciation a memento was awarded to the resource person at the hands of Prof. Gaurang Patkar -HOD Computer department. The session was concluded with a vote of thanks by Prof. Merwyn D'Souza,C-Codes Coordinator.



C. Talk on “Computer Cryptography and Network Security” By Dr. Purushothama B.R, NIT Goa.

The Computer Department of Don Bosco College of Engineering Fatorda Goa in association with C-CODES (Council of Computer Engineering Students) conducted a seminar on the topic “Computer Cryptography and Network Security” on 24th March 2018 from 10.00 am to 12.00 pm. The seminar was attended by the Computer Dept Faculty, T.E & B.E Students. The coordinators for the seminar were Prof. Merwyn D'Souza and Prof. Manisha Fal Dessai.

The idea behind having such a seminar was to guide the third year and final year students of computer engineering regarding computer cryptography and network security as well as final year project topics in this field.

Dr. Purushothama B.R is an Associate Professor in the Department of Computer Science and Engineering at National Institute of Technology Goa was the resource person for this seminar. He completed his M.Tech from National Institute of Technology Surathkal in the year 2009 in Computer Science and Engineering and his Ph.D. in National Institute of Technology Warangal in 2014 on the subject Key Management and Cloud Security. He has also published many international journals.



The seminar started with Dr. Purushothama B.R giving some basic knowledge about secure communication, encryption and decryption of a message and some methods of cryptography, this was followed by a question answer session and Dr. Purushothama B.R informing the students about the various topics under computer cryptography to be taken up for final year projects.



In the end Mrs. Manisha Fal Dessai, Assistant Professor concluded the workshop with a warm vote of thanks. Mrs. Manisha especially thanked Resource person Dr. Purushothama B.R, Head Of Department Mr. Gaurang Patkar & faculty members for sparing their valuable time for the seminar. She also thanked all the students who actively participated in the seminar.

STUDENTS PARTICIPATION IN CULTURAL AND SPORTS ACTIVITIES

Sr. No	Type & Level of Cultural Activities	Date(s)	Organised by	Award/ Prize won	Name (s) of Students
1	State level, Singing	9-02-2018	G V M's College Ponda	3 rd place	Princeton, Desmond
2	State level, Bible Quiz	9-02-2018	Rosary College, Navelim	2 nd place	Samuel crasto, Ceasar
3	Inter college level, Battle of bands	17-02-2018	NIT Goa	1 st Place	Samuel crest, Princeton, Zinho Fernandes
4	Inter college level, Tug Of war	March 2018	Dhempe college , Panaji	2 nd place	Zinho Fernandes
5	Inter college level, Who dares	March 2018	Dhempe college , Panaji	3 rd place	Juel
6	Inter college level, Tug of war	March 2018	Homeopathy college, shiroda	1 st place	Zinho Fernandes
7	Inter college level, Group Dance	March 2018	Homeopathy college, shiroda	1 st place	Nikhil Gaude, Datta, Ashutosh, Videsh, Joel, Ceasor, Princeton

Faculty Coordinator (Cultural): Mr. Amey Shet Tilve

STUDENTS PARTICIPATION IN TECHNICAL EVENTS & COMPETITIONS

Sr. No.	Seminar/Workshop/ Technical Events/Conferences/Traini ng programme etc.	Date(s)	Organized by	Level of Students	Award/P rize won	Name (s) of Students
1	National Level Software Exhibition : S-capade 2018	April 2018	Rosary College, Navelim Goa	BE	1st Place	Vaishnavi Dharwadkar, Ranjani Kumari, shruti Kodlekar, Mitchola, rakshanda
2	National Level Software Exhibition : S-capade 2018	April 2018	Rosary College, Navelim Goa	BE	2nd Place	Yash Prabhu gaonkar,Rahul singh, Ekta singh, Saif
3	National Level Software Exhibition : S-capade 2018	April 2018	Rosary College, Navelim Goa	BE	Participa tion	Sankalp Chari, Sanat Usgaonkar, Shrawan Parkar, Rajdutt kenkre.
4	Semicolans	March 2018	Persistent Systems, Verna Goa	BE	1st Place	Sankalp Chari, Shubham Jha

Faculty Coordinator: Mrs. Kiran Waghmare

FACULTY INITIATIVES

PAPER/ JOURNAL PUBLICATIONS and PAPER PRESENTATION

Author Name	Title of Paper	Details of Journal name,volume,series, year)/ Conference Details
Kiran Waghmare	Prediction of occupational and lifestyle related habitat using analytical model.	68th Annual National Conference of India Associations of Occupational Health (IAOH), at Suzlon Excellence Academy, Pune, 2018
Sweta C. Morajkar	Cluster analysis of temporal data using maximum likelihood estimation.	IJSRST, Volume 1, Issue 5,ISSN: 2395-6011 (International)

WORKSHOPS/SEMINARS/EXPERT TALKS CONDUCTED

Details of Seminar/Workshop/Short Term Courses/Conferences/Training Programmes etc.	Date	Attended by Industry/faculty/ Research Scholars	Name of the Faculty Coordinators
Two- Days Workshop on “Advanced SQL Commands”	27th January 2018 and 24th February 2018	SE Computer students	Prof. Merwyn D’Souza, Prof. Manisha Faldessai, Prof. Norman Dias and Prof. Sweta Morajkar
Workshop on “JAVA Programming”	27th January 2018	TE Computer students	Prof. Lilavati Samant
Workshop on “BLENDER”	24 th February 2018	TE Computer students	Prof. Gaurang Patkar, Prof. Merwyn D’Souza, Prof Amey Tilve and Prof Amey Kerkar
Workshop on “PYTHON Programming”	24th March 2018	SE Computer students	Prof. Amey Sinai Kerkar Prof. Amey Tilve.

WORKSHOPS/SEMINARS/EXPERT TALKS ATTENDED

Seminar/Workshop/Short Term Courses/Conferences/Training Programme etc.	Date	Duration	Organization	Name of the Faculty Participated
<i>Seminar on “Nuclear Tech: Scripting National Development”</i>	3/2/2018	1 day	DBCE, BARC - Mumbai	Merwyn Dsouza, Manisha Fal Dessai, Christina Barretto, Amey Kerkar, Kiran Waghmare, Amey Tilve,
Cryptography and Network Security - Seminar	24/03/18	1 day	Don Bosco College of Engineering, Fatorda	Prof. Gaurang Patkar Merwyn Dsouza, Manisha Fal Dessai,

				Christina Barretto, Amey Kerkar, Norman Dias, Amey Tilve,
One week TEQIP III, AICTE-ISTE, STTP on “ Research Tools and Techniques ”	7th to 11th May 2018	One week	Don Bosco College of Engineering, Fatorda	All faculty

UPCOMING EVENTS

- **Two-Week Internship Program from 2nd July to 14th July 2018 for TE and BE students.**
- **“DRUPAL” Workshop for B.E. Computer Students.**
- **Workshop on “Java Programming” for T.E. Computer Students.**
- **“Blender” Workshop for S.E. Computer Students.**
- **Workshop on “GreenFoot” for T.E. Computer Students.**
- **Expert Talk on Current Affairs for T.E. Computer Students**
- **Workshop on “Matlab” for S.E. Computer Students.**
- **Two-Days “National Conference on Emerging Trends in Computer and Electronics Engineering (NCETCE-18) ” in association with ISTE and CSI from 8th to 9th November 2018.**