PVPS**IT** NEWS

A Half Yearly News Letter **Department of Information Technology**

PVP Siddhartha Institute of Technology
(Sponsored by Siddhartha Academy of General and Technical Education)
NBA Accredited and ISO 9001: 2008 certified Institution
Kanuru, Vijayawada- 520 007

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Quotation:
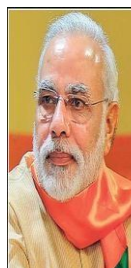
IT+IT=IT; Indian talent + Information technology = India Tomorrow
— *Narendra Modi* —

IOT for Emerging Technical Applications

One week faculty development program was conducted on **"IoT for emerging Technical Applications"** in association with National Institute of Technology, Warangal, under the scheme of Electronics & ICT Academy, to the faculty of various colleges, coordinated by Dr.P.V.S.Lakshmi during 21st to 26th November 2016. A total of 64 faculty from various colleges were participated in the workshop. The whole course is handled by academicians from premier institutions, Industry experts and Research advisors .Prof. DVLN Somayajulu, NIT Warangal, Prof. Rashmi Ranjan Rout NIT Warangal, Sri Dileep Paruchuri, Project Director, Intel Technologies, Bangalore, Prof. Sandeep Chakravorty, IIT Kharagpoor, Mr. Anup Jayanth Kelkar, Nagpoor, Prof K Chandra Sekharan, NIT Surathkal, Mr. Madhusudhan, Orange Research Labs, Hyderabad introduced the participants to the amazing world of IoT and its fascinating applications. This FDP served as a platform to train and educate the research scholars, faculty, and people from industry to interact on cutting edge technologies in this emerging area.
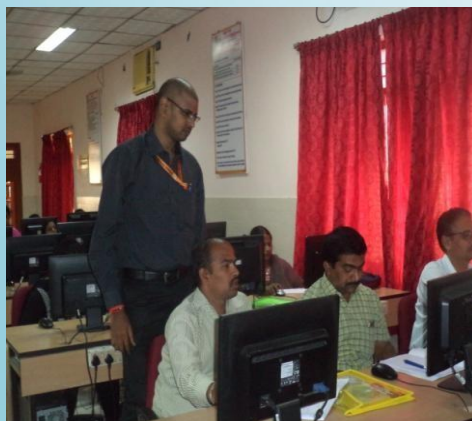
❖ A two day workshop was organized on **"Augmented Reality**" for the students of III year IT coordinated by Dr.P.V.S.Lakshmi during 14th & 15th October 2016. Mr. Sampuran Singh, Sr. Research and Development Head & Co Founder of Dalvik Apps addressed and explained the concepts of augmented reality. He enlighten that the augmented reality (AR) is a live, direct or indirect, view of a physical, real-world environment whose elements are augmented by computer-generated sensory input such as sound, video, graphics or GPS data. A total of 82 students were participated in the workshop.

❖ Department of Information Technology conducted five day workshop on "**Game Design"** from 03.12.16 to 08.12.16 for III B.Tech students by Koneru Monish Aditya, Game developer, Indian Servers, Vijayawada who has trained on Build Box animation tool.

❖ Two day workshop on **"Linux Administration"** was conducted for nonteaching staff members of the college by Mr. Vamsi Krishna, Developer, Swetcha foundation, and Mr. G Samdani, Developer, Executive member, Swetcha foundation, Hyderabad on 8th and 9th Dec 16 in association with IQAC and Mrs.A.Haritha & Mrs.G.Lakshmi from IT department as organizing members.

<mark>GUEST LECTURES CONDUCTED BY THE DEPARTMENT</mark>

1. Dr P.V.S Lakshmi, Coordinator, **INTAEL** organized various events to students of IT on the eve of **Engineer's day** on 15-9-2016.
2. A Guest Lecture was conducted on **"Image Processing & Higher Studies Opportunities in USA"** **for** the III & IV year of IT students on 18.10.2016 by Prof Dr. Bing Ling, Central Michigan University, USA.
3. A guest lecture was conducted on **"Awareness on Quality Projects and Internship opportunities in Intel India"** for III B. Tech Students on 21.11.2016 under Industry/Institute Interaction by Mr. Dileep Paruchuri Project Director, Intel Technologies Bangalore.
4. An awareness program was conducted on **"SBI Buddy**" app on 03.12.2016 by Smt G. Satya Swarupini, SBI Chief Manger, Vijayawada.
5. A Guest Lecture was conducted on "**Preparedness for campus recruitment drives**" on 20.12.16 by Ms. Banu Yasmeen (Alumni), Asst. Software Engineer, Cap Gemini, Hyderabad.
6. A guest lecture was conducted on 29.12.2016 on **"Innovative Ideas to Ignite Young minds"** by Md. Mageer, Vijayawada

❖ Dr B.V.Subba Rao, Professor, HOD and X-Chairman of CSI Chapter Vijayawada, acted as a **Chief Guest** on the occasion of Engineers day celebrations held on 16-9-2016 at Nova College of Engineering and Technology, Jupudi, Ibrahimpatnam, Vijayawada.

❖ Dr B.V.Subba Rao, Professor& HOD delivered expert talk on **"Internet of Things"** Nova College of Engineering and Technology, Jupudi, Ibrahimpatnam, Vijayawada.

❖ Dr. B. V. Subba Rao, Professor & HOD, acted as guest of honor for a two-day National Conference on Next Generation Computing NCNGC-2016, organized by departments CSE, IT & MCA sponsored by DST & CSI-NRI Student Branch, held from 23-12-2016 to 24-12-2016.

❖ Dr. P.V.S.Lakshmi, Professor delivered a guest lecture on "Research at Scope and Challenges in Opinion Mining" at Nimra Institute of Technology on 28-12-2016.

❖ Dr. P.V.S.Lakshmi, Professor delivered a guest lecture on "Big Data Analytics" at Nimra Institute of Technology on 17-12-2016

STAFF ACHIEVEMENTS

❖ Mr. G. Venugopal, Asst. Professor registered for Ph.D. program in CSE at ANU under the guidance of Dr.G.Rama Mohan Babu, Professor (IT Dept.), RVRJC, Guntur.

❖ UGC sanctioned a grant of Rs: 2,40,000/- to Mr. Y.Suresh for minor research project titled "**Image segmentation reconstruction and analysis using kronecker calculus**".

❖ Mrs.A Haritha is appointed as a reviewer for *Global Research and Development Journals* from September 2016.

❖ Mr.Y.Suresh & Mr.K.Pavan Kumar got associate membership in Institute of Engineers (IE)

PAPERS PUBLISHED BY STAFF

1. Dr J Rajendra Prasad published a paper on **"A Review on the State of Art of Internet of Things"**, International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE) e-ISSN 2278–1021 Volume 5 Issue 7, July 2016 ,Scientific Journal Impact Factor : 4.855.

2. Mr.Y.Suresh and Mr.K.Pavan Kumar published a paper on "**Efficient and Scalable Management of Data in the Cloud**", International Journal of Modern Sciences and Engineering Technology (IJMSET), Vol. 3, Issue. 5, PP: 46-53, July 2016.

3. Mr.R.Vijaya Kumar Reddy, Mr.K.Prudvi Raju and Mr.L.Ravi Kumar Published a paper on "**Image Denoising using Filters with Varying Window Sizes: A Study"** in International Journal of Current Trends in Engineering & Research (IJCTER) e-ISSN 2455–1392 Volume 2 Issue 7, July 2016 pp. 48 – 53Scientific Journal Impact Factor : 3.468

4. Mr.R.Vijaya Kumar Reddy and Mr.K.Prudvi Raju published a paper on "**Review on Image Compression Techniques"** in (IJSRSET) | Volume 2 | Issue 4 | Print ISSN: 2395-1990 | Online ISSN: 2394-4099 Scientific Journal Impact Factor: 6.209.

5. Mrs DKavitha published a paper on **"Finding Frequent Sub graphs in a Single Graph based on Symmetry"** International Journal of Computer Applications (0975 – 8887) Volume 146 – No.11, July 2016 Journal Impact Factor: 3.1524.

6. Mr.R. Vijaya Kumar Reddy, Mr.K. Prudvi Raju and Mr.L.Ravi Kumar published paper on **'Grey Level to RGB using YCbCr color Space Techniques"** The International journal of Computer Applications (0975-8887) Volume 147-No.7, August, 2016

7. Dr.B.V.Subba Rao published a Scopus indexed paper on "**Data Security for Cloud Using Public Key Cryptosytem**", IJCTA control theory & applications September 2016,pp:4445- 4552, International Science Press

8. Dr.J.Rajendra Prasad, Dr.B.V.Subba Rao, Mr.D.Ratnam and Mr.S.Sai Kumar published a paper on "**An Intuitive Based clustering on Document Mining using Dirichlet Process mixture Models and its kernels"** in International conference on signal processing, Communication, Power and Embedded system (SCOPES)-

2016 in IEEE Explorer, organized by Centurion University of Technology and Management Paralakhemurdi, Odisha, India during 3rd to 5th October 2016.

9. Mrs.G.Reshma published a paper titled "**An Enhanced apriori algorithm for finding frequency of items over big transactional data based on map reduce framework"** in International Journal of Control Theory and Applications (SCOPUS Indexed), volume 9 issue 17-2016.

10. **A** paper titled "**Medical Image Processing–An Overview**" published by Mrs.O.Ramadevi in International Journal of Innovations in Engineering and Technology (IJIET) in November 2016

11. Mr.D.Ratnam presented a paper on **"An Intuitive Based clustering on Document Mining using Dirichlet Process mixture Models and its kernels"** in International conference on signal processing, Communication, Power and Embedded system(SCOPES)-2016 in IEEE Explorer, organized by Centurion University of Technology and Management Paralakhemurdi, Odisha, India during 3rd to 5th October 2016.

12. Ms.M.Sowjanya and Ms.K.Sri Vijaya presented a paper on **"An algorithm for Basic IOT Architecture"** in 3rd International conference on Emerging Technologies in Computer Science & Engineering (ICETCSE 2016), organized by CSE & IT at VRSEC during 17th and 18th October 2016.

13. Mrs. D.Kavitha published a Paper "**Significant Sub Graph Mining with representative Set**" in Indian Journal of Science & Technology, vol 9, issue 44, Nov 2016.

14. Mrs.A.Haritha and Dr P.V.S.Lakshmi published a paper "**Extraction of Tweets using Wrappers and Streaming API"** in International Journal of Control Theory and Applications, 9(31)2016, International Science Press., ISSN : 0974-5572.

15. Mrs. K.S.Rani, Mrs.D. L. Dharani and Mr.P. Ravi Prakash published a paper "**New Mechanism for Efficient Cloud Data Analysis Service in Large Scale Social Networks**" in IJDCST-December 2016.

16. Dr J.Rajendra Prasad, Mr.S.Sai Kumar and Mr.T. D. Ravi Kiran presented a paper in National Conference on Next Generation Computing NCNGC -16 organized by department of CSE, IT & MCA sponsored by DST & CSI conducted at NRI college of Engineering, Agiripalli.

17. Dr. B.V.Subba Rao and Mr. L. Ravi Kumar Presented paper on "**Prediction of crop Intelligence Attributes using a Data Visualisation Tool**" in National Conference on Next Generation Computing NCNGC-2016, organised by departments of CSE, IT & MCA sponsored by DST & CSI-NRI Student Branch during 23-12-2016 to 24-12-2016

SEMINAR/CONFERENCE/WORKSHOPS ATTENDED BY STAFF

1. MrsY.Padma Participated in one day **"NPTEL WORKSHOP"** conducted on 25th June 2016 at PVPSIT Organized by National Program on Technology Enhanced Learning (IIT Madras).

2. Dr.PVSLakshmi, Mrs.D Kavitha, Mrs.A Haritha, Mr.K Pavan Kumar, Mrs.G Lakshmi, Mr.S Sai Kumar, Mr. M Sundara Babu, Mr.L.Ravi Kumar and Mrs.O.Rama Devi attended Five days Faculty development program, National Level STC on **"Open Source Technologies"** Conducted by NITTTR Chandigarh organized by Knowledge center at PVPSIT from 29-08-2016 to 23-09-2016.

3. Mr T D Ravi Kiran and 18 students of third and fourth year attended One Day Medical Camp Organized by Silicon Andhra in association with YIVO at Kuchipudi Village as Volunteers on 7-8-2016. (Sunday)

4. Mr S.Sai Kumar attended workshop on **"Google Android Workshop"** (Android Developer fundamentals) from 6-9-2016 to 10-9-2016 at VVIT, Guntur.

5. Ms K Sri Vijaya attended a 4 day faculty Improvement program on: **"Cloud Computing Innovation Council of India" (CCICI)** from 22-9-2016 to 25-9-2016 at APSSDC Siemens COE Center, VVIT, Guntur.

6. MrsJ.Sirisha Mrs.G Reshma, Mrs.A.Haritha, Mrs.G.Lakshmi, Mr.D.Ratnam, Mr.M.Sundara Babu, Mr.L.Ravi Kumar, Mrs.O.Rama Devi, Mrs.K.Swarupa Rani, Mrs.Y Padma, Mrs.D.L.Dharani, Ms.M .Sowjanya and Ms.K. Sri Vijaya attended one week Faculty Improvement Program on "**Machine Learning with R**" from 27-9-2016 to 1-9-2016 organized by department of CSE and CSI-DIV-V (Education And Research) at PVPSIT.

7. Dr. P.V.S.Lakshmi attended a conference on "**Industry Academia Connect 2016**" at KITS college, Guntur on 29/09/16.

8. Mr.S.SaiKumar and Mr.L.Ravi Kumar attended a national seminar on **"Intelligent Systems for more connected World (IOT)"** organized by Institute of Engineers & APSSDC on 24th & 25th October 2016 at Fortune MuraliPark,Vijayawada

9. Mr.M.Sundar Babu participated in FDP on **"IBM Cloud Computing"** from 17.10.2016 to 26.10.2016 organized by APSSDC, department of skill development, entrepreneurship and innovation, government of AP at RVR&JC college of Engineering, Chowdavaram, Guntur.

10. Ms.K.SriVijaya participated in the faculty development program on **"Effective Teaching**", organized by P.B.Siddhartha College of Arts & Science, Vijayawada on 24th October 2016.

11. Dr.J.Rajendra Prasad, Mrs.J.sirisha, Mrs.G.Reshma, Mrs.A.Haritha, Mr.Y.Suresh, Mrs.G.Lakshmi, Mr.S.SaiKumar, Mr.L.Ravi Kumar, Mrs.O.Ramadevi, Mrs.SwaroopaRani, Mr.T.D.RaviKiran, Mrs.Y.Padma, Mrs.D.Leela Dharani, Ms.M.Sowjanya, Ms.K.SriVijaya, Mr.K.Prudhvi Raju participated in the faculty development program on **"IoT for emerging** Applications" from 21ST to 26th October 2016 organized by Department of IT, PVPSIT, Vijayawada in association with "EICT Academy NIT Warangal" sponsored by Department of Electronics & Information Technology.

12. All the faculty members of IT attended a guest lecture on "Outcome based Education on 5TH Nov 2016 by Dr G.Varaprasad, BMS College of Engineering, Bangalore, Organized by dept of CSE, PVPSIT.

13. MrsG.Reshma, MrsJ.Sirisha, MrsA.Haritha, MrM.Sundarbabu, MrG.Venugopal, MrsK.SwaroopaRani, MrsO.Ramadevi, MrsY.Padma, MrsD.Leela Dharani and MrsG.Lakshmi attended a Short term course on "**Cloud Computing through ICT** " from 5th to 9th December 2016 organized by NITTTR Chandigarh in association with department of CSE, PVPSIT.

14. Mr.K.Pavan Kumar & Ms.K.SriVijaya participated in two-day workshop on "**Linux Administration**" in association with IQAC was organized by CSE, IT and MCA departments during 8th - 9th December 2016.

STUDENT ACHIEVEMENTS

1. R. Hemalatha, S. N. S. M Praneetha won First Priz**e** in Debate Competition organized by ISTE Student Chapter, PVPSIT Vijayawada on 23-6-2016.

2. V.Rudrani(14501A12A9) &P.Sravya(14501A1284) of III/IV B.Tech participated in "Pragna" Event and secured 1st prize in Lakshya-2k16, a 11th National Level Technical & Cultural Fest at LBRCE, held on 1st October 2016.

3. M.SrinivasaRao(14501A1269),S.SaiGeetha(14501A1295)&Likitha(14501A1282) of III/IV IT got 2nd prize in Lakshya-2k16 a 11th National Level Technical & Cultural Fest at LBRCE, held on 1st October 2016.

4. K.Naik Sandeep(14501A1254) of III/IV B.Tech participated in MAGISTECH event and won 1st prize in Technical paper presentation conducted by ISTE TS & AP STUDNETS CONVENTION -2016 and MAGISTECH-2016 held at MGIT,Hyderabad on 27th & 28th October 2016.

5. N. Pavan Kumar of III/IV B.Tech (14501A1238) participated in MAGISTECH event and won 3rd prize in Technical paper presentation & also 1st prize in Code Geek event conducted ISTE TS & AP STUDNETS CONVENTION -2016 and MAGISTECH-2016 held at MGIT, Hyderabad on 27th & 28th October 2016.

6. III year Students V.Rudrani(14501A12A9) & M.Kavya(14501A1276) secured 1st prize, S.Geetika (14501A1295) & N Likitha(14501A1282) secured 2nd Prize and M.Navya Sri(14501A1277) & M.Lavanya(14501A1270) secured 3rd Prize in Poster Presentation "Energy Conservation day" celebrations, at PVPSIT, on 19th December 2016.

7. K.Chinmai (14501A1249) got Gold medal and First Prize in 100 meters Sprint event in VIVA VVIT conducted by VVIT, Namburu from 21-12-2016 to 22-12-2016.

8. M.Pavan Kumar (15501A1254) got consolation prize in "CODE ARCHITECT 1.0" a coding event conducted by ACM student chapter, organized by department of CSE, PVPSIT on 28-12-2016.

PLACEMENTS

A Total of 30 students placed in various companies in campus placements till December 2016

S.No	Name	Roll No.	Company Name	Date
1	Battepati Lahari	13501A1208	CAPGEMINI	22.10.2016
2	Jyothi Manepalli	13501A1236		
3	Katikireddy Tulasi Pravallika	13501A1242		
4	Kokku Akhila Andal	13501A1243		
5	Kolli Suneetha	13501A1246		
6	Maddali Venkata Harish Kumar	13501A1255		
7	Mandepudi Supraja	13501A1258		
8	Ponnam Shanmukha Rama Rao	13501A1287		
9	Puvvadi Kavya	13501A1291		
10	R.B.V. Niharika	13501A1294		
11	Shaik Reshma Chandni	13501A1298		
12	Priyanka Somireddy	13501A1299		
13	Syed Feroza Kousar	13501A12A1		
14	Talupula Sudheer Kumar	13501A12A5		
15	Venna Lakshmi Prasanna	13501A12B4		
16	Sayana Dhruvasanth	13501A1297	FSS	28.10.2016
17	Gudi Navya	13501A1229	TCS	02.11.2016
18	Doddaka Nikhileswari	13501A1224	TECH MAHINDRA	02.11.2016
19	Kakumani Prasanthi	13501A1237		
20	Mokkapati Saisri	13501A1268		
21	Parimi Ramya Sree	13501A1282		
22	Taha Baig	13501A12A4		
23	Indumathi Malisetty	13501A1257	I K S Health	07.12.2016
24	Abburi Sowjanya	13501A1201	VEE TECHNOLOGIES	29.12.2016
25	Bayya Manikanta N S K Sumanth	13501A1210		
26	Charla Venkata Lakshmi Lalitha	13501A1217		
27	Chunduri Likhitha	13501A1221		
28	Jammula Chandra Vidya	13501A1233		
29	Kolla Srija	13501A1245		
30	Palakurthi Swetha	13501A1279		

IIOT: The Fourth Industrial Revolution

What does IOT really mean?

IOT is really about two technology worlds OT and IT colliding. In most industrial companies, they have existed as separate, semi-autonomous departments. They each have their preferred vendors.

Where will the real value in IOT be seen in industry?

Martin said, "I tend to think that the real value is going to be seen at the network level optimization. Where I don't think about optimizing that particular asset, I think about a higher-level function, going back to running a different part profile to a manufacturing plant for a day based on the yield, or based on the need, or the output for the customer and what's available for logistics. That's not necessarily getting the most out of that asset. That's about getting the most economic yield out of an overall opportunity where you do factor in economics."

Economics will play a major role in the fourth industrial revolution. "It's not just about the sensors and the data conductivity. It's understanding the value and then making decisions on how to optimize that hardware based on the economic reality," Martin said.

How is IOT impacting the Fourth Industrial Revolution?

The biggest way that IOT is impacting industry is by creating new opportunities for industries to collect data and accurately analyze it, Schiller said. Pat Kennedy, founder of OSI soft, said that in industrial settings, determining potential equipment failure is greatly enhanced by the use of data.

"As the IOT drives the need for data processing closer to the source, life-critical data that powers driverless cars and provides ambulance routes, and business-critical data that powers app experiences for retailers, will increasingly be processed through edge computing. But the cloud still needs the edge, and edge certainly needs the cloud. The goal is to find the right balance,"

What are the trends in IOT security in industrial settings?

Nelson said, "With the exponential increase in sensors deployed on CII networks, there is an exponential increase in the number of points hackers will have to access CII networks. As decisions are made over the next year or years, it'll be important to ensure those sensors and their supply chain are secure. Knowing where components come from and understanding the security of those devices will be critical. There will have to be greater integration and interfacing of IT.

BY
Mr. B.SUMANTH
Ms.B.LAHARI
Ms.M.INDUMATHI
Ms.A.RAMYA SRI