



SREE VIDYANIKETHAN ENGINEERING COLLEGE

(AUTONOMOUS)

Sree Sainath Nagar, A. Rangampet – 517 102

Department of Information Technology

Newiz-IT 2018-19

A Creed on Technology

e-News letter – Issue I

Department Profile:



The Department currently offers undergraduate program B.Tech in Information Technology. The present intake is 120. We provide state of the art facilities both in the classrooms as well as in the laboratories. The department has a team of well qualified, experienced and committed staff members. It provides an atmosphere conducive for acquiring knowledge and emphasizes on practical learning. The department motivates both cultural and physical activities.

Message from the HoD:



I am happy to share the developments being made to project the activities of the students through this newsletter wherein it explores the information on the student support, mentoring, tutoring, study skills, workshops and career developments activities in the Department. I would like to congratulate all members of the editorial board for their sincere effort to release this new edition of venture. I earnestly wish and sincerely hope that the new publication turns out to be a resounding success.

VISION

To become a nationally recognized quality education center in the domain of Computer Science and Information Technology through teaching, training, learning, research and consultancy.

MISSION

- ✦ The Department offers undergraduate program in Information Technology and Post graduate program in Software Engineering to produce high quality information technologists and software engineers by disseminating knowledge through contemporary curriculum, competent faculty and adopting effective teaching-learning methodologies.
- ✦ Igniting passion among students for research and innovation by exposing them to real time systems and problems
- ✦ Developing technical and life skills in diverse community of students with modern training methods to solve problems in Software Industry.
- ✦ Inculcating values to practice engineering in adherence to code of ethics in multicultural and multi discipline teams.

Program Educational Objectives:

After few years of graduation, the graduates of B. Tech. (IT) Program would have:

- PEO1. Enrolled or completed higher education in the core or allied areas of Computer Science and Information Technology or management.
- PEO2. Successful entrepreneurial or technical career in the core or allied areas of Computer Science and Information Technology.
- PEO3. Continued to learn and to adapt to the world of constantly evolving technologies in the core or allied areas of Computer Science and Information Technology.

Program Specific Outcomes:

On successful completion of the program, the graduates of B. Tech (IT) program will be able to:

- PSO1. **Data Management:** Design and develop database systems, apply data analytics techniques, and use advanced databases for data storage, processing and retrieval.
- PSO2. **Information Security:** Apply network security techniques and tools for the development of highly secure systems.
- PSO3. **Application Development:** Analyze, design and develop efficient algorithms and software applications to deploy in secure environment to support contemporary services using programming languages, tools and technologies.
- PSO4. **Intelligent Systems:** Apply concepts of computer vision and artificial intelligent for the development of efficient intelligent systems and applications.

Achievements:

- ✚ Dr. K. Ramani, Professor, Published Book Chapter, Positioning Improvement of Sensors in Wireless Sensor Networks, Soft Computing in Wireless Sensor Networks, CRC Press
- ✚ Dr. K. Ramani, Professor, Published Book Chapter, Neighborhood Algorithm for Product Recommendation, Computational Intelligence and Big Data Analytics pp 37-53
- ✚ Dr. M. Naresh Babu, Published Book Chapter, Internet of Things and Personalized Healthcare Systems, A Computational Approach to Predict Diabetic Retinopathy Through Data Analytics.
- ✚ Dr. M. Naresh Babu, Published Book Chapter Cognitive State Classifiers for Identifying Brain Activities, Computational Intelligence and Big Data Analytics. Springer Briefs in Applied Sciences and Technology.
- ✚ Ms. Ch. Prathima, Asst.Professor, Published Book Chapter, A Survey on Efficient Data Deduplication in Data Analytics, Soft Computing and Medical Bioinformatics. Springer Briefs in Applied Sciences and Technology.
- ✚ Ms. Ch. Prathima, Asst.Professor, Published Book Chapter, Data Mining Efficiency and Scalability for Smarter Internet of Things', Computational Intelligence and Big Data Analytics. Springer Briefs in Applied Sciences and Technology.
- ✚ Ms. Ch. Prathima, Asst.Professor, Published Book Chapter, Internet of Things and Personalized Healthcare Systems, A Computational Approach to Predict Diabetic Retinopathy through Data Analytics.
- ✚ Mr. M. Mahendra, Asst.Professor, Published Book Chapter, Data Mining Efficiency and Scalability for Smarter Internet of Things', Computational Intelligence and Big Data Analytics. Springer Briefs in Applied Sciences and Technology.

Published in Journals:

- ✚ Dr. K. Ramani, presented paper on "An Experimental Comparative Study on Slide Change Detection in Lecture Videos", International Journal of Information Technology, Vol. No: 2(1) and Page nos:1-8, July 2018.
- ✚ Dr. K. Ramani, presented paper on "Energy aware multi objective genetic algorithm for task scheduling in cloud computing", International Journal of Internet Protocol Technology, Vol. No: 11(4), September 2018.
- ✚ Dr. K. Ramani, presented paper on "A Novel Multisite Product Ranking Model for Real time E-Commerce Applications", Journal of Advanced Research in Dynamical and Control Systems, Vol. No: 10(10) and Page nos: 288-309, October 2018.
- ✚ Dr. K. Ramani, presented paper on "Simulation of IoT Applications using Proteus", International Journal of Engineering and Techniques, Volume 4, Issue 4, July - Aug 2018, ISSN : 2395-1303.
- ✚ Dr.L.V.Reddy , presented paper on "A systematic approach to reduce the load energy consumption in cloud mining", International Journal of Applied Engineering Research, Vol. No: 13(7). August 2018.
- ✚ Dr.L.V.Reddy , presented paper on "An Efficient Way for Scrutinizing the Job Seekers Data to Select a Right Candidate", International Journal of Scientific Research in Computer Science, Engineering and Information Technology, Vol. No: 3(6) and Page nos: 329-335, ISSN : 2456-3307 August 2018.
- ✚ Dr.L.V.Reddy , presented paper on "An Efficient Way for Scrutinizing the Job Seekers Data to Select a Right Candidate, Volume 3 | Issue 6 and Page nos: 329-335 ISSN: 2456-3307.
- ✚ Dr.L.V.Reddy , presented paper on "Subspace Clustering Based Class Level Cloud Fault Prediction", Journal of Advanced Research in Dynamical and Control Systems, Vol. No: 10(12) and Page nos: 1735-1743, October 2018.
- ✚ Dr. K. Khaja Baseer Online Speaker Recognition in Robust Speech Coder using Phonemic Distance Measurements for Security in the Military Net-centric Communications", International Journal of Pure and Applied Mathematics, Vol. No: 120(6) and Page nos: 3747-3762, July 2018.
- ✚ Mr. V. Lokanadha Naidu. presented paper on "Robust image hashing using SIFT feature points and DWT approximation coefficients", ICT Express Korean Institute of Communications Information Sciences, Vol. No: 18(4) and Page nos: 154-159, September 2018.
- ✚ Dr. O. Obulesu presented paper on "Contributions of Machine Learning Algorithms for Diabetes Prediction - A Survey", Journal of Advanced Research in Dynamical and Control Systems, Vol. No: 10(10) and Page nos:650-656, October 2018. ISSN: 1943-023X.

- ✦ Dr. O. Obulesu presented paper on "Energy Saving using Green Computing Approach for Internet of Thing (IoT) based Tiny Level Computational Devices", Recent Patents on Computer Science, Vol.No: 12(4), December 2018.
- ✦ Mr. Ch. Sreenu Babu , Mr. M. Mahendra , Ms. Ch. Prathima presented paper on "Frequent Itemset Mining in Large Databases by using Artificial Bee Colony(ABC) Algorithm", International Journal of Management, Technology and Engineering, Vol. No: 8(10) and Page nos: 2525-2531, October 2018.

Published in Conferences:

- ✦ Dr. K. Ramani, presented paper on "Enhanced Speech Recognition with Audio Processing using Adobe Audition" presented at National Women's Conference on Technological Innovations (NWCOTI-2018), KL Deemed to be University, Vaddeswaram during 28th-29th December 2018.
- ✦ Dr.L.V.Reddy, presented paper on "Efficient Spatial Database Keyword Query Search", presented at 5th International Conference on Cognitive Science and Artificial Intelligence(ICCSAI '18), Institute of Bioinformatics and Computational Biology(IBCB), Visakhapatnam during 28th - 29th December 2018.
- ✦ Ms. V. Jyothsna, Mr Bhasha and Mr. Mahendra M presented paper on "A Two Level Intrusion Detection System Using Bio-Inspired Approach & Meta-heuristic Scale", presented at SocProS 2018, School of Electrical Engineering, Vellore Institute of Technology, Vellore during 17th-19th December 2018.
- ✦ Ms. V. Jyothsna presented paper on "A flow based Network Intrusion Detection System for High Speed Networks using Meta-Heuristic Scale, 3rd International Conference on Information and Communication Technology for Sustainable Development with ICT Awards the Excellencia(ICT4SD 2018), Hotel Vivanta Taj, GOA, India during 30-31st August 2018.
- ✦ Ms. Ch. Prathima, presented paper on "De-duplication of Big Data in Cloud Storage, National Women's Conference on Technological Innovations (NWCOTI-2018), KL Deemed to be University, Vaddeswaram during 28th-29th December 2018.
- ✦ Dr. O. Obulesu, Mr. M. Thrilok Reddy, Mr. M. Mahendra presented paper on "Machine Learning Techniques and Tools: A Survey," July, 2018 International Conference on Inventive Research in Computing Applications (ICIRCA), Coimbatore, 2018, pp. 605-611.

Workshops/Conference /FDP Organized:

- ✚ Dr.O.Obulesu and Mr. M. Mahendra organized One Week Faculty Development Program on "Free and Open Source Software (FOSS)" on 03.12.2018 to 07.12.2018.

Department of Information Technology organized one week Faculty Development Program (FDP) on "Free and Open Source Software (FOSS)" during December 03-07, 2018 at Sree Vidyanikethan Engineering College, A. Rangampet. About 60 faculty members are actively participated and gained useful information from all the sessions.



Dignitaries on the Dias during Inauguration on 03-12-2018

Dr. K. Ramani, Professor & HOD of IT, SVEC, delivered a lecture on "**Overview of FOSS**" from 10.30 AM to 11.30 AM. She interacted with the participants and clarified their doubts regarding the applications of Free and Open Source Software.



Dr. K. Ramani, Professor & Head of IT delivering a lecture on "Overview of FOSS"

✚ Dr. K. Ramani and Mr. B. Bhaskar Kumar Rao organized Four day Faculty Development on “Amazon Web Services” 10.12.2018 to 13.12.2018.

The program was inaugurated by Dr. K. Ramani, Convener and HOD, IT. She welcomed the resource persons Mr. S. Mohammed Ghouse, Manager of Projects, APSSDC and Mr. Gopi Krishna, Sr. Developer – APSSDC.

Mr. S. Mohammed Ghouse, Manager Projects, APSSDC gave “Introduction to Amazon Web Services” and demonstrated “How to launch Windows EC2 instance in AWS”. He explained all the benefits of cloud platform offers and its influence on forthcoming future.



Mr. S. Mohammed Ghouse, delivering Session about introduction to Amazon Web Services

Mr. N. Gopi Krishna, Sr. Developer – APSSDC discussed “How to assign Elastic IP address”, “how to manage Elastic Block Storage (EBS)” and explained “How to configure Amazon Simple Storage Service (Amazon S3)”.



Mr. Gopi Krishna, delivering Session on Amazon S3

- ✦ Mr. Ch. Sreenu Babu and Mr. V S V S S M. Chakradhar organized Five-Day Staff Development Programme on Oracle SQL and PL/SQL from 19-11-2018 To 23-11-2018.

A Five day Staff Training Program on "Oracle SQL and PL/SQL" was organized by the Department of Information Technology from 19th November to 23rd November, 2018. All the sessions were handled by in-house Faculty members. The STP programme received an overwhelming response with 22 participants from IT, CSE, CSSE, CE, EIE departments SVEC, Tirupati. The STP aimed to provide skills on database design and development using database tools, opportunities to Technicians and Staff to enrich their knowledge and skill in Databases through Oracle SQL. The programme was also planned to develop skills on PL/SQL with advanced software in the field of Databases for inculcating learning values in participants.



All the sessions were very informative. This STP helped in equipping the participants with knowledge and skills in Oracle SQL and PL/SQL. The discussed areas are of great benefit for the participants as the topics match with the current working domain. Participants were enlightened with the most widely used advanced technologies in this domain. The content knowledge of the given participants in the respective domains is updated. The participants were also given some exercises regarding the lecture of program. Last but not the least when the house was open for questions the participants were keen to ask and with the same level of enthusiasm they were justifiably answered by the expert speakers.



Workshops/Conference /FDP Attended:

- ✦ Dr. K. K. Baseer and Mr. A. Ramprakash Reddy attended One day Workshop on IoTs: Hands-on Tutorial & Deep Learning with Tensor flow on Google Cloud platform, Research Expo, IIT Sri City, Chittoor, 06.10.2018.
- ✦ Dr. K. K. Baseer attended One Week FDP on Data Analytics-ABoot Camp with Hands on using Python, SSN college of Engineering, from 26-11-2018 to 30-11-2018.
- ✦ Dr. K. K. Baseer attended Two Day Hands on workshop on IoT and Drones by Leadingindia.ai, Bennett University, Great Noida, India, SVEC, Tirupati, 28-12-2018 to 29-12-2018.
- ✦ Dr. O. Obulesu attended 3D Printing and Scanning – Multi disciplinary Applications & Research Perspectives at SVEC, Tirupati from 26-11-2018 To 27-11-2018
- ✦ Ms. Ch. Prathima and Ms. B. Sangamithra attended One week FDP on Machine Learning and Deep Learning, SVCET, Tirupati from 12-11-2018 to 17.11.2018.
- ✦ Ms. V. Jyothsna and Ms. E. Sandhya attended Two Day workshop on “Leadership Challenges for Professional Women, SVCET, Tirupati 16-11-2018 to 17.11.2018.
- ✦ Mr. G. Uma Mahesh attended faculty training program on CCNA (Module 1 and 2) conducted by Cisco Networking Academy and State Board of Technical Education and Training (SBTET) Govt. Polytechnic, Vijayawada from 19-11-2018 to 28-11-2018.
- ✦ Mr. G. M. Chanakya, Ms. C. Silpa and Ms. K. Lakshmi Prasanna attend One Week Hand-on Workshop on Big Data Analytics &Start-Ups, SVMVVT, Tirupati from 01-12-2018 to 07.12.2018.
- ✦ All faculty of Department of IT attended One week FDP on Free and open source software (FOSS), SVEC, Tiruotati, 03-12-2018 to 07-12-2018.
- ✦ Mr. Ch. Sreenu Babu, attended Two Week FDP on Entrepreneurship Development, Ni-msme, Hyderabad, from 03.12.2018 to 03.12.2018.
- ✦ Dr. K. Ramani, Dr. K. K. Baseer and Ms. B. Sangamithra attended Three Day FDP on Object Detection &Recognition Using Deep Learning Techniques Sree Vidyanikethan Engineering College, Tirupati, 20-12-2018 to 22-12-2018.

Online Certifications:

- ✦ Mr. G. Uma Mahesh Successfully completed online Certification on “Basics of R programming language for Buddies”, by, Udemy, 21-07-2018
- ✦ Ms. B. Sangamithra Successfully completed a online Certification on “Blockchain Technology & Cryptocurrency in Java”, by, Udemy, 03-09-2018

- ✦ Dr. M. Naresh Babu, Ms. Ch. Prathima Successfully completed online Certification on "Convolutional Neural Networks authorized by Stanford University", by, Coursera 11-09-2018
- ✦ Mr. V. S. V. S. S. S. M. Chakradhar, Successfully completed online Certification on "Blockchain Essentials, an online course on "cognitive class", by, Cognitive Class.ai , 22-11-2018
- ✦ Mr. V. S. V. S. S. S. M. Chakradhar, Successfully completed online Certification on "CS213.X: Algorithms", IIT BombayX, 13-03-2018 To 18-12-2018.
- ✦ Mr. Ch. Sreenu Babu Successfully completed a online Certification on "Machine Learning for Data Science and Analytics", by, ColumbiaX , 27-10-2018
- ✦ Ms. K Lakshmi prasanna, Mr. A. Ramprakash Reddy, Mr. M. Mahendra Successfully completed online Certification on " Programming in C" , NPTEL, Aug-Oct 2018.
- ✦ Ms. V. Jyothsna, Mr. P. Bhasha, Ms. E. Sandhya Successfully completed online Certification on "Computer Networks and Internet protocol" , NPTEL, Aug-Oct 2018.

Guest/Expert Lectures:

- ✦ Organized Guest Lecture on "Inducement Talks" for I B.Tech (IT) students on 06-11-2018.
- ✦ Organized Guest Lecture on "Personality Development-SWOT Analysis" for I B.Tech (IT) students on 05-11-2018.
- ✦ Organized Guest Lecture on "Interview Tips" for II B.Tech (IT) students on 27-10-2018.
- ✦ Organized Guest Lecture on "Personality Development – (Growth Mindset & Time Management)" for II and IV B.Tech (IT) students on 11-09-2018.
- ✦ Organized Guest Lecture on "Gender Equity" for II and IV B.Tech (IT) students on 11-09-2018.
- ✦ Organized Guest Lecture on "Motivation for Higher Studies" for IV B.Tech (IT) students on 05-07-2018.

ICT Tools:

ICT tool can be any educational tool like Moodle Cloud, Canvas, Google Classroom, etc

1. Creation of course with Pre-requisite, course description, objectives, outcomes and syllabus.
2. Students course registration.
3. Announcements about course activities schedule.

4. Conduction of Diagnostic Test and Formative Tests with different form of questions such as multiple choices, Fill in the blanks, True/False, Short and Essay answers, Missing words, Match the following, etc.

www.kkbaseer.moodlecloud.com

www.kkbaseerdemo.moodlecloud.com

www.vjyothsna.moodlecloud.com

www.ramanisvecit28.moodles.com

computernetwork.moodlecloud.com

www.svecit44wt.moodlecloud.com

www.silpa.moodlescloud.com

Students Achievements:

- ✚ K Srirama Koushik (16121A1246), V Spandana (16121A12A9), Y Vamsi Krishna (16121A12B8) attended Entrepreneurship Workshop on Venture Development: Ready Statge at V R Siddhartha Engineering College, Vijayawada on July 03, 2018.
- ✚ A Rishitha(16121A1206), A Rishitha(16121A1232), J Deekshitha (16121A1237), K Yaseswini(16121A1256), K Yaseswini(16121A1259), Manjesh(16121A1263), Sai Narasimha(16121A12A2), V Harshavardhan(16121A12B5) attended Indian Cyber Congress (INCYCON), SVEC, Tirupati on September 29, 2018.
- ✚ Chunduri Pooja Manaswini (16121A1217), Dornipadu Akhila Vidya Sriya (16121A1219), Gajjala Pavan Kumar Reddy (16121A1224), Gatti Pradeep (16121A1230), K Mounika Raj (16121A1242), Kadambari Srirama Koushik (16121A1246), Nakka Thapaswi (16121A1269), Nallagatla Veeranjanyulu (16121A1270), Palamani Ruchitha (16121A1277), S Farhana Thabusum (16121A1293) and Talari Madhu (16121A1298 attended Research Expo, IIIT, Sricity, Chittoor on October 06, 2018.
- ✚ Ravina Ketini (16121A1250), Spandana Vangara, Palamani Ruchitha, Y. Vamsi Krishna
- ✚ Ram Vikas Sake attended DST & Texas Instruments India Innovation Challenge Design Contest – 2018 at IIM, Bangalore on November, 2018.

Research Talks:

- ✚ Mr. P. Srinivasa Reddi, Assocoate Professor, Department of IT, delivered Technical Talk on "Learning Management System through Moodle" on 23.08.2018.
- ✚ Mr. A. Ramprakash, Assistant Professor, Department of IT, delivered Technical Talk on "Evolution of IoT Next", on 17.11.2018
- ✚ Mr. G. Uma Mahesh, Assistant Professor, Department of IT, delivered Technical Talk on "IoT – Data Lakes", on 27.12.2018.

Placements:

S. No.	Name of the Company	IT	Salary (Rs. In Lakhs)
1.	Technovert, Hyderabad	1	4.00-6.00
2.	West Pharmaceutical Services, Bangalore	1	6.07
3.	Mobis Technical Center of India (Hyundai Motor Group), Hyderabad	1	4.50
4.	Infosys Ltd., Chennai (Through HackWithInfy / InfyTq - 2019)	1	5.00
5.	Infosys Ltd., Chennai (Through HackWithInfy / InfyTq - 2019)	4	3.60
6.	Bank of New York Mellon, Pune (Internship)	6	8.00
7.	WIPRO LTD., Hyderabad	29	3.50
8.	Edupolis (Unschool), Hyderabad (CoCubes)	3	5.00
9.	Cognizant Technology Solutions, Hyderabad	40	4.00
10.	Infosys Ltd., Hyderabad	37	3.60
11.	Edupolis (Unschool.in), Hyderabad	1	5.00
12.	Tata Consultancy Services, Hyderabad (Ninja Hiring)	27	3.36
	TOTAL	151	

ARTICLES:

Welcome to the Age of AI </2020>



We are at the dawn of a new age and the implications of AI technology for humans are almost unimaginable. The age of AI discovers the most innovative and leading technologies that will change the world forever. Technology is moving faster than ever, and it's taking less time to be widely adopted.

Demystify some common misconceptions about things we thought, understood, but probably don't, terms such as "machine learning" "algorithms", "computer vision" and "Big Data", they will be conveniently unpacked to help us feel like we know what we're doing. It's an extraordinary time, one of unprecedented change and possibility. To know what's happening, there is a need to look at innovators pushing the boundaries of A.I and how their groundbreaking work is profoundly impacting our lives and the world around us. There are innovators with different visionaries exploring identity, creativity, and "A collaboration between humans and machines".

AI is basically an emulation of us. AI can give us that answer that we've been seeking all along. Are we alone? Each time with powerful technology there is a bigger lever for changing the world. Artificial Intelligence can help us to feed the world population. "AI is teaching the machine and the machine becoming smart". All out there are of sci-fi magic, and now just science. This is insane. We are at the dawn of a new age The Age of AI.

How Far is Too Far?

Can A.I. make music? Can it feel excitement and fear?

How far is too far, and how much further can we go?

Identically it took roughly 10,000 years to go from writing to the printing press, but only about 500 more to get to the email. Now it seems we're at the dawn of a new age, The Age of AI.



Healed through A.I.

The human body is not infallible, but through the wonders of A.I. research scientists are finding ways to address those imperfections. A.I. has the potential to heal, enhance and make up for the things our bodies lack.

- ✓ There are two certainties in life. Death and Taxes.
- ✓ Can't we get rid of one of those?

Years ago, life expectancy was only 45, and then by the 1950s, it was up to 65, and today, it's almost 80.

So, there is require to know how machine learning is combating one of the leading causes of blindness, and enabling a son with neurological disease to communicate with his family. "AI is changing the way we think about mind and body, life and death" and what we value most, our human experience.

Using A.I. to build a better human

Through life-changing accidents, and data-minded through NASCAR, human beings are finding ways to rebuild one another so that we are better, faster, and stronger than ever before and all with the help of A.I. Rebuilding the things with the technology, and making it better than it was 'Better' 'Stronger' 'Faster'. So, it's all about rebuilt with robotics machine parts with enhancements via technology and engineering, but the idea of enhancement actually dates back much further, to ancient Hinduism. So next stories are about augmenting our human abilities, everything from a bionic limb that behaves naturally and understands intent, to data that improves performance, and vision enhancement that saves people in actual life-threatening situations. It seems with A.I anything is possible.

There are certain qualities that are untouchable for A.I, or at some point might it be able to emulate everything. Even the stuff that we consider to be distinctly human, like instinct. Can a machine compete like an athlete, can a program write a movie, or could a robot be your soul mate? So, will machine ever be capable of understanding emotion, or

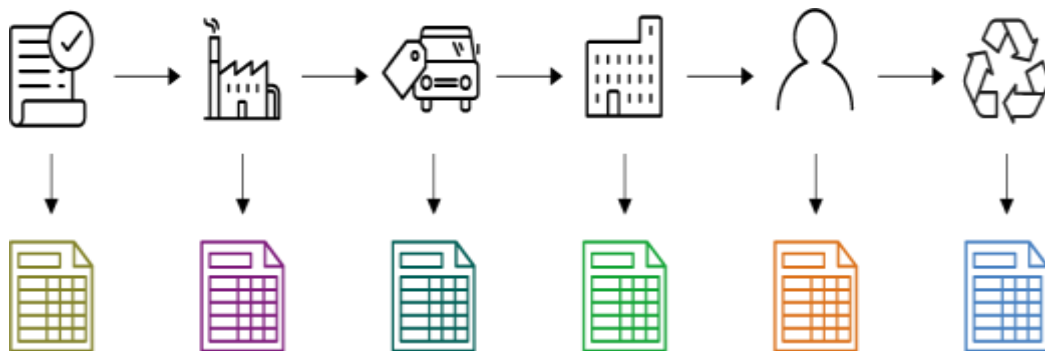
feeling it? Empathy, loneliness, connecting on a deep human level? Using psychological insight, and some innovative AI, we can try decode, or code the mystery, the crazy little thing called LOVE



KETINI RAVINA (16121A1250)

Blockchain - A Technology with many Applications

Emerging technologies regularly serve as enabling forces for economic, social, and business the financial sector and encompasses any business that acts as or relies on an intermediary between two parties—for example, a buyer and a seller—and extracts economic rents from a brokerage position in the value chain. Therefore, blockchain is predicted to challenge existing business models and offer opportunities for new value creation. Unfortunately for businesses, there is little guidance on the different blockchain



technologies and solutions in existence today and how these might affect businesses and business models. While the blockchain technology underpinning Bitcoin is the most discussed variant, it is far from the only one. While it is easy to find sources that support blockchain’s potential to disrupt all business activity as profoundly as the internet, email, social media, or mobile did, it is much harder to find material that explains how blockchain technologies vary and how the different types can offer value to businesses.

FOUNDATIONS OF BLOCKCHAIN TECHNOLOGY:

The beginnings of blockchain go back to a white paper written by Satoshi Nakamoto (2008). Nakamoto introduced a peer-to-peer version of electronic cash, bitcoin, that allows online payments to be sent directly between parties without going through

centralized financial intermediaries. As part of the implementation of bitcoin, Nakamoto also devised the ledger, which Nakamoto named "a chain of blocks" (Nakamoto, 2008, p. 7). This chain of blocks supports the new version of electronic cash. Blockchain provides a decentralized digital database of transactions, also known as a distributed ledger, which is maintained and updated by a network of computers that verify a transaction before it is approved and added to the ledger. It allows transacting parties to exchange ownership of digitally represented assets in a real-time and immutable peer-to-peer system without the use of intermediaries.



When a transaction between two parties is about to take place (Step 1), it is first converted into a hashed transaction proposal and stored as a candidate to be printed on the ledger. This proposed transaction includes basic information such as date/time, sender, receiver, asset type, and quantity. The proposed transaction is provided with a unique cryptographic signature that ensures the integrity and authenticity of the record (Step 2) and then broadcast to a network of distributed computers for processing and authentication (Step 3). These computers process and authenticate the transaction (Step 4) and, once authenticated, the transaction is added to the digital ledger (Step 5), which completes the asset transfer between the two parties (Step 6). Each new transaction is linked to those recorded previously, providing a complete, irreversible, and verifiable history of all transactions ever made on this blockchain.



MORE APPLICATIONS

- Using Blockchain for Improved Video Integrity Verification.
- Using Blockchain for Electronic Health Records.
- Blockchain for IOT security.



V. MEGHASYAM
17121A12A9



P. GOVINDU REDDY
17121A1284

Photo Gallery



Chief Guest Dr. Lazar Mathew evaluating the model presented by the students.



Judges evaluating the posters presented by the students.



Mr. Shaik Sarfaraz Ahmed (15121A1295) and Mr. Madisetty Sreekanth (15121A1262) are receiving the SECOND Prize award.