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A mini project competition for the course "Object Oriented Programming & Computer Graphics

A mini project competition for the course "Object Oriented Programming & Computer Graphics" was conducted for SE Computer, AIDS and CSD students on 13th Dec 2022 by sponsored by the KKWIEER CSI students branch and Debuggers' Club of Department of Computer Engineering, K. K. Wagh Institute of Engineering and Education Research, Nashik .Mr.Yash Gade,Software Developer,NVIDIA and Prof. Rasika Ghavate, Assistant Professor, MCA Department, K. K. Wagh Institute of Engineering Education & Research, Nashik worked as judges for the competition. Total 25 groups participated in the competition and the first 3 rankers were declared. The projects implemented by students were mainly focusing on Game development, animation clips etc.Judges appreciated efforts and work done by the students. The activity was coordinated by Prof. P. P. Vaidya, Prof. N. M. Pagare, Prof. J .R. Mankar and Prof.P. V. Sanap under the guidance of Head of Department Prof. Dr. S. S. Sane.

From Campus to Corporate

The event "From Campus to Corporate" was organized by KKWIEER CSI student' chapter on 14/12/2022 with a motto to make students placement ready by testing their technical and communication skills through various intriguing rounds such as Aptitude Round, Group Discussion, Technical Round and Personal Interview. The event was a huge success with over 140 participants. As the name suggests aptitude round was conducted to test the analytical and logical reasoning skills of students. It was conducted as Computer Based Test (CBT) in online manner by using "Myexamo" platform provided by TPO cell of our college. Next was the Group Discussion round which tested the communication skills of students. Not only that, but students were rigorously judged based on their confidence and personality development. Every group had 7 members and they were given 7 minutes 2022-2023 Session 2 for the group discussion. The topics were given on the spot. Then was the Technical round which was held online on Hacker rank, where every student had to solve three challenges, the round was successful as a very real-time platform was used to test the students. Finally the top 15 shortlisted students got the opportunity to witness Personal Interviews by Industry Experts which further included technical and HR round and top 4 candidates were chosen as winners. The rounds were followed by Valedictory Ceremony of "From Campus to Corporate". The ceremony started by lightning of lamp, followed by prize distribution of winners and was concluded by Prof. Dr. S. S. Sane where he elaborated on the importance of taking part is such events and also being active and aware about the various technical events happening around and motivated students by saying participating in any event the most important step over winning. The event was coordinated by Dr. Y.D. Bhise, CSI Faculty Coordinator.

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*****Congratulations*****

Dr. Y.D. Bhise : Editor of Book "Futuristic Trends in Network & Communication Technologies" with Series Code IIP_V2_2022_BS_13_02 published by IIP (Iterative International Publishers) . IIP is the leading publisher brand in the world established in USA & India as its primary business locations. Indexing platform RSquareL www.rsquarel.org which is the world's first Direct Abstract Indexing Platform where the quality chapters of this book also will be considered for indexing.

On 17th December 2022, Dr. R. D. Kulkarni, adjunct faculty of dept. Conducted a session on Financial Planning for 10th standard students of Anand Niketan School ,Nasik. Various points like what why and how of the financial planning were explored. The career opportunities in field of Finance were detailed.

On 4th December 2022, Dr. R. D. Kulkarni, adjunct faculty of dept. was invited for evaluation of final round of CompuTalent Exam 2022 organized by Nasik Shikshan Prasarak Mandal. The exam intends to search young talent in computational skills.

Arpan Group Of Blood Banks visit

A visit to Arpan Group of Blood Banks was organized on 19/01/2023. Arpan Group of Blood Banks is a Not- for-profit organization run by a Charitable. They have been serving this domain of public health for last 27years on 24X7 basis. Objective of the visit was to create awareness in students for Blood Banking procedures. Prof. S.K. Gondhlekar and Dr. Y.D. Bhise, visited the said blood bank to discuss with Dr. Atul S. Jain, Vice Chairman, Arpan Group of Blood Banks, regarding the Data management /Data Validation project work for students.The visit was planned under the guidance of Dr. S. S. Sane.

A session on "Road Safety and Traffic Awareness"

A session on "Road Safety and Traffic Awareness" was conducted for FY A, B, C, D, E students during 20/01/23 and 21/01/23. Resource person was Mr. Abhay Bag, Motivational Trainer. Resource person well explained the basics statistics about the traffic accidents occurring on the road that is very serious issue in the country as well as across the world. With the same objective, Institute decided to provide these benefits to the students through this awareness week. Lakhs of people become disabled due to carelessness shown while not properly following traffic rules. The main cause for all the pain and loss of life is the fast and furious driving done by the people. We can stop these accidents if we follow the traffic rules properly. The main reason behind spreading traffic rule awareness is to make people aware about the astonishing numbers of victims in the fatal accidents mainly occurring because of their ignorance to traffic rules. He also gave information about "motor vehicle act and traffic rules" and also said that the best way to keep others and yourself safe is to follow proper traffic rules. Whenever you drive a car follow the traffic rules, it is important to wear helmet while driving a two wheeler, obey the traffic lights to avoid accidents. One should always wear seat belt while driving a car. Avoid rash driving as fast speed is the core reason of accidents. Always carry all the papers of the vehicle with you. The event was coordinated by Dr. Y. D. Bhise under the guidance of Dr. S.S. Sane.

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Mega CSI E-Waste Collection Drive 2023

E-yantran is collaborative initiative of different organizations in Nashik, to sensitize people about e-waste and its scientific management. Mega CSI e-waste collection drive 2023 happened during on 23rd to 26th Jan. 2023 with joint efforts of CSI- Nashik Chapter and Poornam Ecovision Foundation, Pune. KKWIEER CSI student's branch has taken a initiative and was a collection center for this drive. As you are aware that in today's techno-savvy world, a huge generation of Electronic Waste / e Waste is happening. The handling of e-waste in unscientific methods, gives rise to Air, water and Soil pollution, which intern boom-rang on human and environmental health. As a responsible citizen, we must sensitize present as well as upcoming generation about responsible e-waste management. Dr. Y. D. Bhise was a Center Head for the said event. 49 volunteers from the institute including staff and students enthusiastically worked for the said drive. Banners and Posters were displayed at various departments in the college and sister institutes of KKW. Volunteers done the awareness campaign by distributing pomplates. A huge response from institutes, various industries, societies, residential area received and lot of e-waste was collected at the center and then it was hand over to Poornam Ecovision for /recycling, /reuse.

This activity was executed under the guidance of Dr. Y.D. Bhise, Prof. Priya Rakibe, Prof. Vinod Bhamare. The said activity was initiated and supported by Dr. R.D.Kulkarni and Dr. S.S. Sane.

Congratulations

Sakshi Pawar ,Jayesh Gawali, Prathamesh Gadilohar, Atharva Chaudhari TE Computer Engineering students received First Prize with Cash prize Rs.5000/- and certificate in the Paper Presentation competition under the guidance of Prof. Priya D. Rakibe organized by Builder's Association of India in association with MVP's RSM Poly. Nashik on the topic "Waste to Wealth" by the hands of Mr. Nimesh Patel, President, Builder's Association of India.

Dr. R. D. Kulkarni, Adjunct Prof. of the dept. coordinated CSI E-Waste Collection Drive 2023 event as managing committee member of CSI-Nasik Chapter. Her interview related to awareness about e-waste was broadcasted on Nasik Aakashwani 101.4 MHz. She also got opportunity to interact with municipal commissioner of Nasik Dr. Chandrakant Pulkundwar. The interaction aimed at taking this event to next levels in near future.

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Five days Ideation workshop

Five days Ideation workshop for the second-year students on 13th February 2023 to 17th February 2023 was organized by Dr. Y.D. Bhise and Prof. K. P. Birla , Computer Engg. Dept. under the guidance of Dr. R. K. Munje and Dr. G. B. Daware. The sessions were organized about explaining all the concepts design thinking and sessions were conducted by Dr. P. J. Pawar, AICTE-IDEA Lab Coordinator, Dr. R. D. Kulkarni, SWS Solutions, Mrs. Anuja Kulkarni, Solution Architect, Redis, Pune, Prof. I. Priyadarshini, Prof. Saroj Dhake, Head, MBA, Prof. S. Gadge , Prof. Dr. S.M. Kamlapur, Prof. P. P. Vaidya , Mr. Vishal Jadhav, Vice President, NITA , Prof. K. P. Birla , Prof. Dr. Y. D. Bhise , Vaibhav Mahajan, Founder and CEO - AbracaDabra Software Solutions Pvt. Ltd. , Prof. V. S. Kalyankar , Entrepreneur. Students got a lot of knowledge and hands on experience. Student groups presented their idea in the form of a poster at the end of the workshop. Students prepared posters based on the knowledge they received. Emphasis was given on Project based learning and pitching project ideas. Also guidance about Yukti portal and how to upload idea, prototype, innovations on Yukti Portal was given to students. Few prototypes were uploaded on Yukti portal. A total of 36 students actively participated in the workshop.

Prof. K. P. Birla visited InvensysCAD Solutions, Nashik on 28th February 2023. He interacted with Mr. Anil Pagar, Director of the company. It was discussed and identified that several companies are looking to employ AR, VR technology for meeting the client's requirements. Industry personnels in this regard are willing to explore the possibilities of the projects that can be sponsored by the company to the students.

****Congratulations****

Book was published on “Block chain Technology” for SPPU - IT by Techknowledge Publications authored by Prof. C. R. Patil, Prof. K. P. Birla and Prof. S. K. Gondhlekar.

Department of Computer Engineering received unity grant of 350 unity pro licenses worth $2040 per seat = 350 x $2040 = $714000 (INR 5,71,20,000) consecutively for third time.

An expert talk on the topic “Cyber Security Tools”

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An expert talk on the topic "Cyber Security Tools" was conducted on 17th April 2023, 10:15 am to 12:30 pm online mode at department of computer engineering, K. K. Wagh Institute of Engineering and Education Research, Nashik. The motive of the event was to introduce students to Cyber Security basics. The session was conducted by Mr. Vaibhav Bhandari, Security Professor at Merritt College, Oakland CA and Director at Lib13 Inc USA. He covered following points:

- Cyber Security Common tools used in the field of cyber security, including firewalls, intrusion detection systems, and penetration testing software.
- Different attacks and threat in digital world
- Introduction to various certification career tracks and Cyber security job roles available

Students learned about introduction and fundamentals about cyber security. Industry requirement, how cyber security tools and other fields supports cyber security. The session was coordinated by Prof. D. M. Kanade, Prof. S.V. Nirgide under the guidance of head of department Prof. Dr. S. S. Sane.

An expert talk on "The Role of Computer Engineers in Industry and future Scope"

The expert talk on "The Role of Computer Engineers in Industry and future Scope" was conducted by Mr. Sagar Nikam, ELC Nashik on 25th April 2023 at 1.00 pm, at John Von Neuman Hall in Computer Engineering Department for the students of Second year Computer and CSD engineering students. Arond 160 students attended the talk. The session was aimed at providing students with insights into the MBA program, its benefits, and career opportunities as a Computer Engineers in Industry. It covered topics such as the MBA curriculum, specializations, admission process, entrance exams like CAT, GMAT, and GRE, career opportunities, and networking. Towards the end session was well wrapped up with a written Aptitude and Mathematics questions test followed by quick solution and discussion to all questions.

Overall, the session was interactive and informative, providing students with a better understanding of the MBA program and its potential for their future careers as a Computer Engineers. The session was organized under the activity of Debuggers Club and was coordinated by Prof. C. R. Patil and Prof. S T. Patil.

Equinox 2023

The event 'Equinox 2023' was organized by Computer and CSD Engineering Department on 28th April, 2023 in association with CSI Students' Branch and Debuggers Club. The Equinox poster release followed by the inauguration of the event was done by Prof. Dr. S. S. Sane, Head Computer and CSD department. The inauguration ceremony took place at 10 am in the UNIX lab in presence of the faculty coordinators Prof. Smita Patil, Prof. Chaitali Patil and all the faculty members of Computer and CSD department. It had over 400 participants in all from which 300 participants were from KKWIEER and 100 participants from other colleges around Nashik, Pune and Mumbai. It included 5 events namely-
Furious Finders, Shutterbug, Web-Battles, Ideathon, Project Wars.

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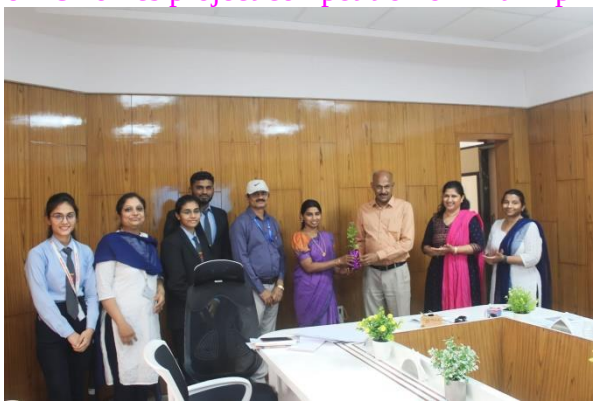
***Prof. Dr. Shirish Sane delivered an expert talk on the topic "Data Science Significance and Application" under staff training academy on 16th March 2023 organized by Gokhale Education Society's College of Engineering, Nashik. He was felicitated by Dr. M. S. Gosavi, Secretary of Gokhale Education Society's College of Engineering, Nashik

***Director Prof. Dr. K. N. Nandurkar along with Vide Principal Prof. Dr. S. S. Sane, I/C head of electrical department Prof. Dr. R. K. Munje attended India Partnership Forum organized by Cormack Consultancy Group in Pune on 18th April 2023. Team interacted with expert of Glasgow Caledonian University for several opportunities for collaboration with K. K. Wagh Institute of Engineering Education and Research, Nashik.

***Felicitation of KKWIEER, Nashik for contributing prominently in ewaste collection drive at CSI Nashik Chapter Foundation Day on 27th April 2023. 10 refurbished computer systems were donated to Social Organizations and Schools.

From left, Mr. Abhay Kulkarni, Nashik First, Dr. Neeta Deshpande, Dr. Rajiv, Chairman and Secretary, CSI Nashik, Mr. Rajesh Manikar, CEO Poornam Ecovision, Pune.

Prof. I. Priyadarshini invited to deliver expert talk and judge for IOTonics project competition on 24th April 2023.



■ A mini project competition for the course "Data Science and Big Data Analytics Lab"

A mini project competition for the course "**Data Science and Big Data Analytics Lab"** was organized by Department of Computer Engineering, K. K. Wagh Institute of Engineering and Education Research, Nasik on 15thMay 2023. Prof. Rupali Bora, Asst. Prof. Department of Information Technology, KKWIEER, was the judge for the competition. Total 12 groups from TE Computer Engineering students have participated in the competition and the first 3 rankers were declared. The projects were from various domains such as Sports, Sales, Finance, Bank, Food, Education etc.

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Pushkar Nikumb, Anushka Unhale and Tisha Kataria Secured the first position for their project "Credit Score Classification".Mansi Shardul, Shreyas Shelke,Kunal Wani and Sakshi Pardeshi have secured second position for their project on "Data Analysis Dashboard for Computer Engineering Department". Jayesh Gavali, Prathemesh Gadilohar, Atharva Chaudhari and Kedar Palve secured third position for their project on "Devanagari Optical Character Recognition" The activity was coordinated by Prof. Dr. S. M. Kamalapur and Prof I. Priyadarshini under the guidance of Head of Department Prof. Dr. S. S. Sane.

Prof. Dr. S. S. Sane delivered talk on NEP on 14th February 2023 SVKT at Deolali.

Prof. Priya D. Rakibe from Department of Computer Engineering received First Prize consecutively from last three years under Professional Category in Essay Competition organized by Computer Society of India ,Nashik chapter with the theme "Covid 19 : Boon or curse for IT industry"

Seminars/Workshop/Training attended by staff:

- Prof. K. P. Birla , Prof. A. V. Tavare , Prof. I. Priyadarshini attended One week online FDP on "Machine Learning" by SIT, Lonavala, Pune from 7th to 11th December 2022.
- Prof. Dr. Y. D. Bhise attended Multidisciplinary STTP on Updations in Teaching Learning Techniques and Research Learning by Priyadarshini College of Engineering, Nagpur from 19th to23rd December 2022.
- Prof. Dr. S. S. Banait attended One Day Online Faculty Orientation Program on "Data Science" by SNJB's Late Sau. K. B. Jain College of Engineering, Chandwad from 17th January 2023.
- Prof. J. R. Mankar attended One day online Faculty Orientation Program on "High Performance Computing" by SITS, Narhe from 20th January 2023.
- Prof. N. M. Pagare attended Webinar on "Faculty Development Program on Assembly with PTC Creo" organized by INVENSYS CAD SOLUTIONS at 28th January 2023.
- Prof. N. M. Pagare attended Online workshop on Intellectual Property Commercialization by TURNIP at 21st January 2023.
- Prof. S. V. Nirgide attended FOP on Cyber Security and Mini project by MET BKC CoE , Nashik at 27th January 2023.
- Prof. S. V. Nirgide attended Webinar on Designing Course Outcomes and Outcomes-focused questions by inpods at 7th January 2023.
- Prof. I. Priyadarshini, Prof. Dr. S. M. Kamalapur attended One-week online FDP on "Data Science", organized by Department of Artificial Intelligence & Data Science, Computer Engineering, Dr. D Y Patil Institute of Engineering and Management Research, Akurdi from 6th to 10th February 2023.
- Prof. Dr. S. S. Banait attended Two days QIP for implementation of NEP 2020 conducted by
- MMIT , Lohgaon , Pune.
- Prof. I. Priyadarshini, Prof. Dr. S. M. Kamalapur , attended One-week online FDP on "Data
- Science", organized by Department of Artificial Intelligence & Data Science, Computer
- Engineering, Dr. D Y Patil Institute of Engineering and Management Research, Akurdi from
  6th to 10th February 2023.

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- Prof. Dr. S. S. Banait attended Two days QIP for implementation of NEP 2020 conducted by
- MMIT , Lohgaon , Pune from 7th and 8th February 2023
- Prof. Dr. S. S. Banait attended 5 Days Online Faculty Development Program on Data Science with Python organized by Shridevi Institute of Engineering and Technology in Collaboration with ExcelR. From 30th January to 3rd February 2023.
- Prof. C. R. Patil attended One-week FDP on Advances and Practical building blocks in Block chain Technology organized by MIT World Peace University from 13th to 17th February 2023.
- Prof. S. T. Patil , Prof. N. M. Pagare attended Microsoft, SAP & AICTE ATAL led Faculty Development Program on “Cloud Computing" under TechSaksham from 30th January to 03rd February 2023.
- Prof. S. D. Jadhav , Prof. P. D. Rakibe attended 5th Technovation Hackathon organized by Sharda School of Engineering and Technology ,Noida from 30th January to 4th February 2023.
- Prof. S. T. Patil, Prof. A. V. Taware, Prof. S. D. Jadhav,Prof. P. D. Rakibe attended 5 days FDP on Deep Learning Application Development Tools & Research, VIIT, Pune from 28th February to 4th March 2023.
- Prof. M. P. Mahajan attended Online workshop on Google Earth Engine: from Theory to Applications, Albedo Foundation, Nashik from 11,18 and 25th March 2023.
- Prof. P. P. Vaidya, Prof. J. R. Mankar attended One week FDP on "Research trends in Data Computing & Machine Learning" from 22nd May to 26th May 2023.
- Prof. K. P. Birla attended Professional Development Program on Immersive Media Technologies AR VR and MR from 8th to 12th May 2023.

Papers Presented by Staff and Student

Title of Paper: Bridging the Gap: Industry and Engineering Institutions through Efficient Collaboration

Author: R.D. Kulkarni, S. S. Sane, D.M. Kanade

Abstract: The engineering educational institutes strive to develop the graduating students to possess the skillsets required by the related industries in the market. However the industries, that seek the engineering graduates as their employees assert that they spend lot of time, money and energy in training these graduates. This fact emphasizes that there exists a gap in the skillsets cultivated in the graduates by the academic institutes and those required at the industries. The main causes behind this have been the differences in their major goals along with the lack of focused collaboration and efforts required to thin the said gap. In this paper we present a model namely ‘Tailored Skills Development Model’ (TSDM) which proves to be effective in bridging this gap. The model proves to be supportive to the engineering institutions where they are able to cultivate the graduates with advanced skills that are necessitated by the industries in the specific engineering disciplines focused by the institutes. And the model also assists the industries to seek the better manpower with adequate skillsets. The model helps to reduce the training period, related cost and energy involved at the industry levels in search of the anticipated skillsets. The paper discusses the organization and implementation of this model at our institute along with the statistics of its execution. Keywords—Engineering education, Engineering institutions, Industries, Tailored Skills Development Model.

Title of Paper: New Approach for Providing Adaptable Curriculum Enrichment through Teaching-Learning and Evaluation

Author: Ravindra Munje, Priya Rakibe, Vikrant Nichit, Anup Dudhekar, and Yogita Shewale

Abstract: Post-pandemic, the perspective -pof the stakeholders of the education industry has changed considering online teaching learning and evaluation. Most of the stakeholders feel that a hybrid learning methodology can be adapted for multiple reasons. However, designing a framework for hybrid teaching-learning and evaluation is not easy. In this paper, an attempt is made to propose one such approach for implementing a hybrid teaching-learning and evaluation mechanism.

First of all, a survey of the students was conducted to understand their opinion about the type of teaching-learning process. Then a strategy is suggested where theory sessions will be conducted online and lab sessions will be conducted in an offline (face-to-face) manner. Further, the implementation strategy, teaching-learning tools, feasibility, applicability, and challenges associated with this are discussed. The successful implantation of the suggested teaching-learning and evaluation method can be a promising solution for accommodating on-campus and off-campus learners.

Title of Paper: Design and Implementation of Deep Learning Method for Disease Identification in Plant Leaf

Author: Rais Allauddin Mulla1, Mahendra Eknath Pawar2, Dr. Satish S. Banait3, Dr. Samir N. Ajani4, Madhuri Pravin Borawake5, Dr. Sheela Hundekari6

Abstract: Design and Implementation of Deep Learning Method for Disease Identification in Plant Leaf Rais Allauddin Mulla1, Mahendra Eknath Pawar2, Dr. Satish S. Banait3, Dr. Samir N. Ajani4, Madhuri Pravin Borawake5, Dr. Sheela Hundekari6 Abstract: In the whole agriculture plays a very important in country's economic condition specially in Indian agriculture has a crucial role for raising the Indian economic structure and its level. India's frequent changing climatic situation, various bacterial disease is much normal that drastically decreases the productivity of crop productivity. Most of the researcher is moving towards into this topic to find the early detection technique to identify the disease in small green leaves plants. A single, micro bacterial infectious disease can destroy all the agricultural small green leaves plants get damaged overnight and hence must be prevented and cured as earliest as possible so that agriculture production. In this research work, we had tried to developed a green small green leaves plants bacterial disease early detection system based on the deep learning network system which will detect the disease at very earlier state of symptoms observed. Deep learning technique is has various algorithms to detect the earliest stage of any of the procedural processing of any bacterial infections or disease. This paper consists of investigations and analysis of latest deep learning techniques. Initially we will explore the deep learning architecture, its various source of data and different types of image processing method that can be used for processing the images captured of leaf for data processing. Different DL architectures with various data visualization's tools has recently developed to determine symptoms and classifications of different type of plant-based disease. We had observed some issue that was un identified in previous research work during our literature survey and their technique to resolve that issue in order to handle the functional auto-detection system for identifying the certain plant disease in the field where massive growth of green small green leaves plants production is mostly done. Recently various enhancement has been done in techniques in CNN (convolution neural network) that generates much accurate images classification of any object. Our research work is based on deep learning network that will observe and identifies the symptoms generated in leaflet of plant and identifies the type of bacterial infection in progress in that with the help of plant classification stated in the plant dataset. Our research work represents the implementation DCGAN and Hybrid Net Model using Deep learning algorithm for early-stage identification of green plant leaves disease in various environmental condition. Our result obtained shows that it has DCGAN accuracy 96.90% when compared with Hybrid Net model disease detection methodologies.

Title of Paper: Effective Decision Making through Skyline Visuals

Author: Dr. R. D. Kulkarni, Mrs. S. K. Gondhalekar, Mr. D. M. Kanade

Abstract: During decision making the end user wish to make optimum choices from a larger space available. A skyline query proves helpful in this scenario. It is a powerful data summarization query which satisfies multiple user preferences presenting the user a precise set to take effective decisions. However as the size of the datasets and the number of user preferences increase, the resultant skylines become huge which diminishes the very cause behind such queries as the large skyline tend to be impractical to take effective decisions. In this paper we have addressed this issue by proposing the concept of 'skyline visuals'. The proposed visuals present the required skyline to the end user in a pictorial form assisting the end user to take best decisions.

The skyline visuals also present the user various types of skylines exploring various other parallel scenarios available for decision making. The end user can also interact with the presented skyline to make more effective decisions. This feature of the skyline visuals enhance the user experience.

Title of Paper: Improved Q-Reinforcement Learning Based Optimal Channel Selection In Cognitive Radio Networks
Author: Sopan Talekar, Satish Banait and Mithun Patil

Abstract: Cognitive Radio Networks are an emerging technology in for wireless communication. With increasing number of wireless devices in wireless communication, there is a shortage of spectrum. Also, due to the static allocation of channels in wireless networks, there is a scarcity of spectrum underutilization. For efficient spectrum utilization, secondary users dynamically select the free channel of primary users for the transmission of packets. In this work, the performance of routing in a cognitive radio network is improved by the decision of optimal channel selection. The aim of this work is to maximize the throughput and reduce the end-to-end delay. Therefore, an Improved Q-Reinforcement learning algorithm is proposed for the optimal channel selection during the packet routing between source and destination. The performance of this work is compared with the existing routing protocols. It is simulated in network simulator-2 (NS2) with Cognitive Radio Cognitive Network (CRCN) simulation. After performance evaluation, it is observed that the proposed work performs better than existing work with respect to packet delivery ratio, throughput, delay, jitter, control overhead, call blocking probability, packet dropping ratio, good put and normalized routing overhead.

Faculty Coordinator: M. P. Mahajan
Publisher: Department of Computer Engineering,
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https://engg.kkwagh.edu.in/academic_programme/news_letter/1