STUDENT ACHIEVEMENTS

2023-24 TOPPERS

TE SEM 5 — **CGPA**
1. LAXMAN SAWANT   -   9.86
2. MUKESHKUMAR PRAJAPAT   -   9.32
3. VIRAJ WADKE   -   9.05

SE SEM 3 — **CGPA**
1. SIDDHART CHAKRAVARTHY   -   9.74
2. ABHISHEK MISHRA   -   9.74
3. SOHAM SHIVPUJE   -   9.74

1ST PRIZE IN TECHBLITZ '24

2ND PRIZE IN CARROM DOUBLES IISM, ANDHERI

1ST PRIZE IN LITERATURE QUIZ

3RD PRIZE IN CULTURE QUIZ EBSB

TEAM SOLECTHON
WINNERS AT MANIPAL UNIVERSITY COMPETITION

AWARDS
1. FUTURE START-UP AWARD
2. COST AWARD
3. LEIGHT WEIGHT
4. MANUVERABILITY
5. HOVERING AND DRAG

FACULTY ACHIEVEMENTS

1. Mr. Yogesh Pingle has conducted 5 expert lectures in other institutes.
2. Mr. Yogesh Pingle has published patent on "MUSICAL MEDICAL ILLNESS HEALINGELECTRONIC DEVICE" in Indian Patent Journal.
3. Ms. Komal Champanerkar has published book "Big Data Analytics" & "Data Analytics and Visualisation".
4. Mr. Ichhanshu Jaiswal and Ms. Leena Raut has completed NPTEL-OBE course with Distinction.
5. 3 faculty members are pursuing Ph.D.
6. 7 faculty members are presented papers in IEEE conference.
7. Mr. Sumeet Shingi has done course on Block chain certification.

FACULTY INCHARGE : Ms. LEENA RAUT
DESIGN TEAM : MUKESH PRAJAPAT, DURVESH KAJREKAR
PUBLICITY TEAM : SAHIL GUJRAL, SIDDHART CHAKRAVARTHY
AUTHORED BY : JAYESH BERDE, ARPIT SUTARIYA, AVI PATTE, ARYAN SINGH

MoU

INDUSTRY NAME	FACULTY CO-ORDINATOR
TechQ Konnect Pvt. Ltd.	Mr. Yogesh Pingle
SS Dies Work Pvt. Ltd.	Mr. Yogesh Pingle
Cloud Counselage Pvt. Ltd.	Mr. Ichhanshu Jaiswal

EXPERT TALK

KETAN PATIL
SYSTEM ENGINEER
NSE, TCS

1. What is future of Data Science job in India?

As Indian businesses continue to produce large amount of data for decision-making and innovation, the need for skilled data scientists is expected to grow and so number of jobs related to data science.

2. Do you think Generative AI will take software developer job ?

AI may automate and make certain jobs of software development easier but it's unlikely to completely replace software engineers. Instead, AI will help developers to improve productivity such as code development, testing, documentation.

3. What is your valuable suggestion to young engineer ?

My suggestion for young engineers will be
- Build your knowledge and stay updated in the latest technologies.
- Concentrate on one domain in which you have pure interest and master it.
- Participate in extra activities such as hackathons, competitions, case studies, build your own projects. Group activities are very important which help you to improve your team bonding, coordination and management skills.

4. How did you prepare for placement/higher studies during your college time?

How I prepare for placement -
- Competitive coding on hackerrank, Leetcode
- Aptitude preparation using Indiabix
- Interview prepration using geeksforgeeks and interviewbit
- Participation in Mock interviews, Mini projects, Case studies, Research Paper, Hackathons, Coding competitions which helped me to build good resume.
- OOPS, OS, DBMS, Big Data revision from engineering syllabus.

Vidyavardhini's College of Engineering and Technology
Department of Computer Science and Engineering (Data Science)

DataCite
Department of CSE(DS) Newsletter
Volume 1; Issue 1; April 2024

ABOUT US

The Department of Computer Science and Engineering (Data Science) was established in the academic year 2021-22 with an initial intake of 60 students. Subsequently, the capacity has grown steadily, reaching 180 seats as of 2023-24. The DAB committee has been formed in 2022-23 to thrive in the continuously evolving field of data science

VISION

To be a front-runner in future tech and data-driven innovation through an interdisciplinary excellence in Computer Science and Engineering with a focus on Data science.

MISSION

1. To provide an environment for learning data science, fostering expertise and innovation.
2. To promote interdisciplinary innovations in emerging data technologies.
   To foster Quality education, ethical values,
3. meeting personal, professional, and societal needs on a holistic level.

PSO

1. To apply the knowledge of Data science to analyze, design and implement application specific problems with modern AI tools.
2. To Analyze problems and design applications to forecast, predict and decision-making using IoT, Big data analytics, Artificial Intelligent, Machine learning technologies.

DR. HARISH VANKUDRE
Principal, VCET

Dear Students, Data science is crucial in today's fast-paced digital world. It enables us to analyze large amounts of data and draw meaningful insights from it, which helps in decision-making and innovation across various industries and domains. Digital transformation is the strategic integration of digital technologies whether it's predictive analytics, machine learning, or artificial intelligence, data science serves as the foundation for creating relatable solutions. As we embark on this journey together, let's focus on achieving excellence and innovation. We should embrace challenges with courage and resilience as each obstacle we overcome brings us closer to our dream of a brighter future fueled by data.

DR. VIKAS GUPTA
HOD, CSE(DS)

Dear Students,
As we face the challenges and opportunities ahead, I am filled with optimism and excitement for the future of our department. Together, we will continue to push the boundaries of knowledge and innovation, harnessing the power of technology to address pressing societal challenges and drive positive change in our world. With collaboration and excellence as our guiding principles, let us come together as a vibrant and dynamic community of scholars, researchers, and innovators. Together, we will write the next chapter in the remarkable story of our Computer Science and Engineering (Data Science) Department—one defined by innovation, collaboration, and a relentless pursuit of excellence. I am honored to serve as your department head, and I look forward to the incredible journey that lies ahead.

MR. YOGESH PINGLE
Deputy HOD, CSE(DS)

Dear Students,
As your Deputy Head, I am honoured to work alongside our dedicated faculty and students, each of whom plays a vital role in shaping the vibrant and dynamic community that defines our department. Together, we are united by a shared passion for knowledge, innovation, and excellence in the fields of computer science and engineering (data science).
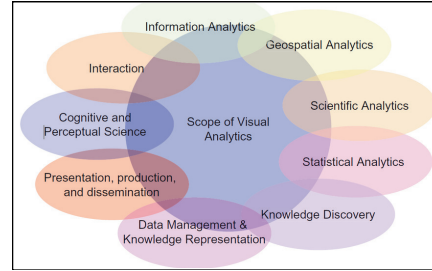
VISUAL ANALYTICS

INTRODUCTION:

Visual analytics utilizes interactive visual interfaces to facilitate analytical reasoning and transform raw data into meaningful insights. By combining techniques from data visualization, statistics, machine learning, and human-computer interaction, it provides users with tools for exploration, discovery, and decision-making. Visual analytics aims to leverage the human visual system's ability to process information quickly, uncovering patterns, trends, and connections within data. Key components include data visualization techniques, interactive interfaces, statistical algorithms, and human-centered design principles. [1]

Visual analytics offers benefits across various domains, enabling individuals and organizations to extract actionable insights from complex datasets to speed up their business performance and improve their business decision-making process.
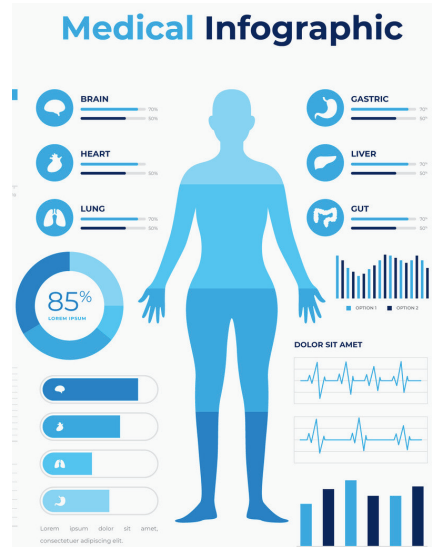
1. Modern interactive visual analytics makes it easy to combine data from multiple sources and deeply analyze the data directly within the visualization itself.

2. Complex datasets become more comprehensible when presented in the form of charts, graphs, and interactive dashboards, allowing users to identify patterns, trends, and relationships more easily.

3. It allow users to interact with data in a visual context allows them to discover hidden relationships and patterns in the data without relying on help from IT.

4. By automating repetitive tasks and streamlining data analysis processes, visual analytics enhances efficiency and productivity.

5. Overall, visual analytics empowers organizations to harness the power of data to gain insights, drive informed decision-making, and achieve their strategic objectives effectively. [2]

APPLICATION IN REAL LIFE:

Business Intelligence and Data Analysis: Visual analytics is widely used in business intelligence to analyze sales data, customer behavior, and market trends. It helps businesses identify patterns, correlations, and outliers in large datasets, enabling them to make informed decisions, optimize processes, and drive growth.

Healthcare Management: In healthcare, visual analytics is used for clinical decision support, disease surveillance, and resource management. It allows healthcare professionals to analyze patient data, track medical outcomes, and identify areas for improvement in patient care and operational efficiency.
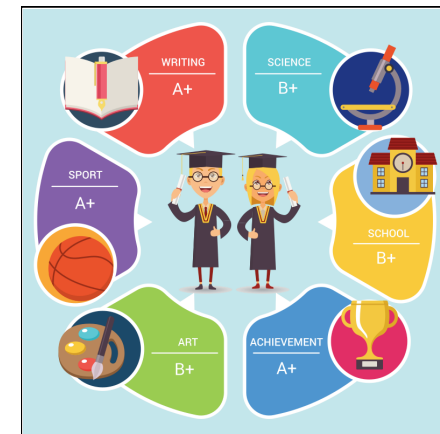

Finance and Investment: Financial institutions utilize visual analytics to monitor market trends, manage investment portfolios, and assess risk exposure. It helps traders and analysts visualize financial data, identify trading opportunities, and make timely investment decisions.

Cybersecurity and Fraud Detection: Visual analytics is essential for detecting and responding to cybersecurity threats and fraudulent activities. It enables security analysts to monitor network traffic, detect anomalies, and investigate security incidents in real time.

Scientific Research and Data Exploration: Visual analytics is widely used in scientific research to analyze complex datasets from experiments, simulations, and observations. It helps researchers visualize data, identify patterns, and gain insights into scientific phenomena across various disciplines.

Education and Learning Analytics: In education, visual analytics is used to analyze student performance, track learning outcomes, and optimize educational programs. It helps educators visualize student data, identify at-risk students, and personalize learning experiences to improve academic success. [3]

REFERENCES:

[1]
W. Cui, "Visual Analytics: A Comprehensive Overview," in IEEE Access, vol. 7, pp. 81555-81573, 2019, doi: 10.1109/ACCESS.2019.2923736.

[2]
Pak Chung Wong and J. Thomas, "Visual Analytics," in IEEE Computer Graphics and Applications, vol. 24, no. 5, pp. 20-21, Sept.-Oct. 2004, doi: 10.1109/MCG.2004.39.

[3]
https://www.analyticssteps.com/blogs/10-applications-data-visualization

https://www.freepik.com/freevector/school-infographic-withstudents_1117280.htm

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INDUSTRIAL VISITS

ADANI THERMAL POWER PLANT DAHANU, PALGHAR

Mr. Ichhanshu Jaiswal, Ms. Maya Varghese, Ms. Odilia Gonsalves, along with 39 CSE(DS) SEM IV students, organized an industrial visit to the Dahanu Thermal Power Plant. Covering an extensive area of 821 hectares, with 451 hectares dedicated to greenery, the plant is visually striking. With a substantial capacity of 500 MW, it plays a crucial role in meeting the energy demands of the region. Established for a significant period, the plant holds a prominent position in the industry.

CONTENTSTACK AND RAW ENGINEERING VIRAR WEST

BE and Third Year students, accompanied by Prof. Yogesh Pingle, Prof. Krunali Vartak, and Prof. Leena Raut, visited Contentstack & Raw Engineering in Virar West on March 27, 2024. The visit featured introductions to the companies, insights into current tech trends, office tours, and a seminar on software development domains. Concluding at 4:00 pm, it offered practical insights aligning with academic learnings.

PLACEMENTS

To gear-up the students for facing the recruitment process successfully, an extensive pre-placement training on aptitude, group discussions, interviews and presentation is offered to the students. Collaborating with leading training agencies like IMS, Campus credential, Career Launcher for conduction of Aptitude Development training & Soft skills development to provide high-quality training by seasoned trainers experienced in corporate education.
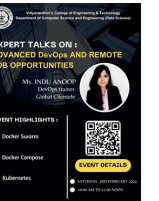
ISTE APPROVED ONE WEEK STTP

"MLOps: A Modern Approach to Design, Develop and Operate Machine Learning Models". The aim of this Short Term Training Program is to make faculty members aware about the latest technologies in MLOps. The STTP will make attendees enhance their knowledge of current trends of Machine Learning, DevOps, MLOps and tools.

SEMINARS/WEBINARS

Indu Anoop, a DevOps trainer, conducted the Guest Talk on "Advanced DevOps and Remote Job Opportunities." Ms. Leena Raut initiated the session, attended by HOD Dr. Vikas Gupta, faculty members, and SE and TE students. The session covered Docker Containers, Docker Swarm, and Kubernetes with live demos, concluding with positive feedback from over 60 students.

Pranshu Diwan, a Data Scientist at Fidelity Investments conducted a webinar for students of the CSE(DS) department. Mr. Diwan elucidated the workings and applications of LLM Models, alongside insights into prompt engineering and evaluation matrices for LLM Models. Concluding with an overview of career prospects in Data Science in India and the US

The session on MLOps, led by Kushagra Soni, a data engineer at Terralytics Analysis Lab, provided insights into building a successful career in AI, emphasizing differences between AI and ML, MLOps, industry trends, Python packages, and resume-building tips. Attendance exceeded 120 students, with the session concluding with a vote of thanks.

Prof. Amit Aylani from VIT conducted a session titled "Enhance your Network through LinkedIn Profile." Prof. Aylani focused on educating students about utilizing LinkedIn to build a professional appearance, which can enhance internship and job opportunities. He discussed available internship sources on LinkedIn, how to engage in events, and offered tips on presenting achievements effectively on the platform.

Ms. Ankita Malani, Lead Software Engineer at MobileIron, conducted an expert talk aimed at raising awareness about the latest trends in cloud computing within the industry. Her session provided valuable insights into emerging technologies and practices, fostering a deeper understanding among attendees. Participants gained knowledge about current advancements and their implications, enhancing their preparedness for evolving industry demands.

12+ Successful Placement till date and going on

Mr. Harshkumar Devmurari
Zeus Learning, 7.5 LPA