



Academic Year: 2020-21 Department of Computer Engineering

## **ACADEMIC REPORT**

<u>January 2021 – June 2021</u>

- 1. About Department
- 2. Administration
- 3. Special Academic Programs
- 4. Faculty Contribution
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  - 4.2 Interaction of Faculty with Outside World
  - 4.3 Seminars/Workshops/Conferences/FDP/STTP/Expert talk organized
  - 4.4 Seminars/Workshops/Conferences/FDP/STTP/Expert talk attended
- 5. Students' Achievement
- 6. Placement Data





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# **1. DEPARTMENT**

#### **Department VISION**

To impart high quality education, promote research culture and inculcate ethical values to develop/produce professionally competent engineers capable of meeting global challenges.

#### **Department MISSION**

- 1. Encourage research aptitude and analytical approach to prepare students for facing technological challenges in computing field.
- 2. Develop professionals, equipped with soft skills, ethical and social values for betterment of society.
- 3. Create awareness about sustainability concerns and ongoing trends in computing field.
- 4. To nurture and provide a collaborative environment for enabling aspiring technocrats to meet industry expectations.
- 5. Provide competent faculty and systematic modern approach in teaching-learning with stateofart infrastructure.

#### **Program Educational Objectives [PEO]**

- 1. To impart quality education to students, while encouraging innovations and research culture in keeping abreast with technological advancements in computing.
- 2. To develop computer professionals with comprehensive knowledge, capable of facing indigenous and global challenges.
- 3. Develop computer professionals to fulfill industry expectations and social aspirations.





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#### Programs Specific Outcomes [PSO]

By the completion of Computer Science program, the student will have following Program specific outcomes.

- 1. Ability to understand and assess fundamental and advanced principles of computer hardware and software systems.
- 2. Comprehensive knowledge and practical competence with a broad range of programming languages enabling graduates to understand the structure, design and development methodologies of software systems on various platforms.
- 3. Ability to efficiently model real-world problems using appropriate data structures and algorithms.
- 4. Capability of applying computing knowledge in multidisciplinary domains to identify problems and provide solution to them.

#### About the Department

- Started in the year 2001 with undergraduate program affiliated with University of Mumbai.
- NBA Accredited
- Intake: BE: 120, ME: 18, PhD: 10
- Fully air-conditioned classrooms with LCD Projectors
- Laboratories equipped with advance software and hardware
- Provide all kinds of support to develop application with advanced technologies.

#### **Courses offered**

- B.E Computer Engineering
- M.E Computer Engineering
- Ph.D Technology

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# **2. ADMINISTRATION**

## **ACM Committee**

Dr. Narendra Shekokar

Prof. Aruna Gawade

Prof. Pankaj Sonawane

**Project Committee** 

Prof. Chetashri Bhadane

Prof. Ruhina Karani

## **Academic Report**

Prof. Chetashri Bhadane

Prof. Aniket Kore

## **Departmental Library Committee**

Prof. Pankaj Sonawane

Prof. Sonali Jadhav

## **Maintenance Audit Committee**

Prof. Pankaj Sonawane

## DJ Unicode Committee

Dr. Narendra Shekokar

Prof. Pranit Bari

Prof. Aniket Kore

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## **Program Assessment Committee**

Dr. Narendra Shekokar

Dr. Ram Magrulkar

Prof. Kiran Bhowmick

Prof. Chetashri Bhadane

Prof. Pranit Bari

Dr. Meera Narvekar Prof. Aruna Gawade

Prof. Khushali Deulkar

Prof. Ruhina Karani

## **Time-Table Committee**

Prof. Lakshmi Kurup

Prof. Deepika Dongre

## **Cultural Committee**

Dr. Meera Narvekar Prof. Sudhir Bagul

## **SAP** Attendance

Prof. Khushali Deulkar

Prof. Lynette D'mello

Prof. Deepika Dongre

## **Placement Committee**

Prof. Kriti Srivastava

Prof. Pankaj Sonawane

## **Internship Committee**

Dr. Ram Mangrulkar





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## **Sports Committee**

Dr. Narendra Shekokar Prof. Pankaj Sonawane

## **Stationary Incharge**

Prof. Ashok Patade

## **Entrepreneurship Incharge**

Dr. Ram Mangrulkar

## Lab Incharges

Prof. Kiran Bhowmick Prof. Aruna Gawde Prof. Chetashri Bhadane Prof. Sindhu Nair Prof. Ashok Patade Prof. Pratik Kanani

## Alumni coordinator

Prof. Khushali Deulkar Prof. Ruhina Karani

## **Mentor Incharge**

Prof. Sindhu Nair

## **Exam Coordinator**

Prof. Ruhina Karani Prof. Deepika Dongre

## **Class Incharges**

Prof. Deepika Dongre Prof. Khushali Deulkar Prof. Lynette D'Mello Prof. Sudhir Bagul Prof. Aniket Kore Prof. Sindhu Nair





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# **3. SPECIAL ACADEMIC PROGRAMME**

# **3.1** One Day Faculty development program on "Applications of Power Automate, Power Virtual Assistant for AI Educational Bot" on 5th June 2020.

#### **Objective:**

DJSCE's Department of Computer Engineering organized an online one day workshop on "Applications of Power Automate, Power Virtual Assistant for AI Educational Bot" for the faculty members of all SVKM institutes. The objective of this FDP was to acquaint the participants regarding the emerging trends in Education and keep them at pace with the growing influence of AI and automation in this field.

#### **Speakers:**

Dr. Ramchandra Mangrulkar, -Associate Prof. DJSCE

#### No. of participants: 117

#### **Topics Covered:**

- Introduction to Power Automate and its applications.
- Introduction to Power Virtual Assistant and its applications.
- Integration of Power Automate and Power Virtual Assistant for creating AI Educational Bots.

#### **Outcome:**

Participants received a hands-on and practical based training for the use of Power Automate and Power Virtual Assistant tools and their applications to ease and automate the different tasks and responsibilities of an educator.





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## 3.2 Expert talk on the topic "Machine Learning: Optimization Techniques" organised on 15<sup>th</sup> April 2021

#### **Objective:**

The objective of this expert lecture was to discuss Optimization techniques and latest trend/practices/applications going on in Industry in AI and Machine Learning domain.

#### **Speakers:**

- 1. Ms. Mansi Shah, Arya.ai (https://arya.ai/)
- 2. Mr. Deekshith Marla, Founder and CTO, Arya.ai (Forbes Asia 30 under 30)

#### No. of participants: 100

#### **Topics Covered:**

- Machine Learning Introduction
- Optimization
- Ongoing applications/projects

#### **Outcome:**

The participants understood the usage of various technologies and approaches which industry people have been using to design the projects. The participants provided positive feedback regarding the content, delivery, knowledge of a guest speaker and organization of the lecture.





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# **4. FACULTY CONTRIBUTION**

## 4.1 Faculty Publications: National / International Conference / Journal

Sr. No.	Name	Journal/ Conference	National / International	Title	Publication	Date
1.	Dr. Meera Narvekar	Journal	International	A Semi-Supervised clustering based classification model for classifying imbalanced data streams in the presence of scarcely labeled data	International Journal of Business Intelligence and Data Mining, Inderscience Journal.	Accepted and scheduled for publication
2.	Dr. Narendra Shekokar	Journal	International	NdRAdAC: Need based Access Control Framework for an Emergency Response System.	Turkish Journal of Computer and Mathematics Education[Scopus]	April 2021
		Book	NA	Design of Intelligent Applications Using Machine Learning and Deep Learning Techniques	Taylore and Francis CRC Press	
3.	Dr. Ramchandra Mangrulkar	Journal	International	Online Public Shaming Approach using Deep Learning Techniques	Journal of University of Shanghai for Science and Technology.	March 2021





		Book Chapter		Application of Steganography for Secure Data Transmission Using Lossless Compression.	IGI Global Recent Challenges in IoT-Springer Nature	
		Conference	International	Park it : Intelligent Parking System	IEEE xplore ( Scopus Indexed)	January 15- 16, 2021
		Book Chapter		Impact of cyber security threats on IoT applications.	CRC Press/Taylor & Francis Group	
4.	Aruna Gawade	Book Chapter		Rust: A secure language for secure applications.	CRC Press/Taylor & Francis Group	
		Book Chapter		Deep neural networks for Cybersecurity	CRC Press/Taylor & Francis Group.	
5.	Kiran Bhowmick	Journal	International	A Semi-Supervised clustering based classification model for classifying imbalanced data streams in the presence of scarcely labeled data	International Journal of Business Intelligence and Data Mining, Inderscience Journal.	Accepted and scheduled for publication.



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6.	Kriti Srivastava	Journal	International	NdRAdAC: Need based Access Control Framework for an Emergency Response System.	Turkish Journal of Computer and Mathematics Education[Scopus]	April 2021
7.	Pratik Kanani	Journal	International	ORIGAMI – Oration to Physiognomy.	Turkish Journal of Computer and Mathematics Education	April 2021
8.	Sindhu Nair	Book Chapter	NA	Design of Intelligent Applications using Machine Learning and Deep Learning Techniques	Chapman and Hall/CRC	Upcoming in August 2021
10	D	Book Chapter		Combating COVID- 19 using object detection techniques for next-generation autonomous systems-	ELSEVIER	
10.	Ruhina Karani	Book Chapter		Applications of Machine Learning in Psychology and the Lifestyle Disease Diabetes Mellitus-	CRC Press, Taylor & Francis Group	





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## 4.2 Interaction of Faculty with Outside World

Sr.No	Name	Activity
		Deliver talk on title Security Threats and Mitigation Technique at Terna College of Engg. On April 2021.
1.	Dr. Narendra Shekokar	Delivered talk on "Cyber Threats and Mitigation in Smart Computing" on 04th January 2021 during one week ISTE approved Online Faculty Development Program on "Cyber Security and Ethical Hacking."
		Worked as a reviewer for
		-IEEE Conf., ICCICT 21, Cyber Security
		-IEEE Conf ,CTFC 2021, Smart City
		-IEEE Conf, (ICMLBDA) 2021, ML
		Conducted One Day Hands on Workshop on "Research Writing, Research Preparation and Research Tools" at SMMCA Nagpur on 17th April 2021.
		Delivered a Talk on "Innovation tools for Research" in Two
		Days workshop on "Research Publications" (RTCEIT-2021) at SKNSITS Lonawala, Pune on 26th February 2021.
2.	Dr. Ram Mangrulkar	Delivered a Talk on "Innovation in Research Tools" in One Week online Faculty Development Program on "Research
		Trends in Computer Engineering and Information Technology"
		(RTCEIT-2021) at Smt. Kashibai Navale College of Engineering,
		Pune on 8th January 2021.
		Worked as Academic expert in Search Conference to identify
		and validate technical skills in Computer Science and
		Engineering Department organized by Tulsiramji Gaikwad-
		Patil College of Engineering, Nagpur on 25th March 2021.





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## 4.3 Seminars/Workshops/Conferences/FDP/STTP/Expert talk organized

Sr. No.	Name	STTP / Workshop / Seminar Details	
1.	Chetashri Bhadane, Kriti Srivastava	Expert talk on the topic "Machine Learning: Optimization Techniques" Speaker: Ms. Mansi Shah Mr. Deekshith Marla No. of Participant: 100 Venue: Online, Date: 15 <sup>th</sup> April 2021	

## 4.4 Seminars/Workshops/Conferences/FDP/STTP/Expert talk attended

Sr.	Name	Activities		
No.				
1.	Dr. Narendra Shekokar	<ol> <li>One Week Online Faculty Development Program on "Research Methodology and Tools" Organized by Sandip Institute of Technology and Research Centre</li> </ol>		
2	Dr. Ram Mangrulkar	<ol> <li>Two Weeks Faculty Development Program (Online) on "Machine Learning and AI using Python" during 14th to 26th May 2021 organized by Knowledge Solutions India (Microsoft Partner).</li> <li>Three Days Faculty Development Program (Online) on "Role of Machine Learning &amp; Artificial Intelligence in Data Analytics" during 24th to 26th March 2021 organized by Bajaj Institute of Technology, Wardha.</li> </ol>		
3	Kriti Srivastava	<ol> <li>Shaping a Data Science Curriculum. 5th - 9th April 2021</li> <li>Applications of Microsoft Power Automated &amp; Virtual Assistance for AI Education Bots- 5th June 2021</li> </ol>		



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4	Chetashri Bhadane	<ol> <li>FDP on Data Sciences (ATAL)</li> <li>FDP on Stress Management (ATAL)</li> <li>Webinar on:         <ul> <li>Research Paper Writing</li> <li>Patents and design</li> <li>Artificial Intelligence for Healthcare</li> <li>Intellectual Property: Yesterday, Today and Tomorrow</li> <li>Career options in the field of Intellectual Property</li> </ul> </li> </ol>
5	Ruhina Karani	<ol> <li>Applications of Microsoft Power Automated &amp; Virtual Assistance for AI Education Bots- 5th June 2021</li> <li>AICTE's Inculcating Universal Human Values in Technical Education-1 Week</li> <li>AICTE-ATAL's Reinforcement Learning and Its Applications- 1 Week</li> <li>Successful research paper: concepts to submission- 1 day</li> </ol>
6	Lakshmi Kurup	<ol> <li>Emotional Intelligence-AICTE FDP(7th to 11th June, 2021)- 5 days</li> <li>Applications of Microsoft Power Automated &amp; Virtual Assistance for AI Education Bots- 5th June 2021</li> </ol>
7	Lynette D'Mello	<ol> <li>Applications of Microsoft Power Automated &amp; Virtual Assistance for AI Education Bots- 5th June 2021</li> <li>Faculty Development Program Student Induction on UHV - 5 days</li> <li>Recent Advancements in Software Development Practices, Artificial Intelligence and Communication Technologies: Digi tal India Perspectives - 5 days</li> <li>Successful research paper: concepts to submission- 1 day</li> </ol>
8	Pranit Bari	Recent Advancements in Software Development Practices, Artificial Intelligence and Communication Technologies: Digital India Perspectives



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9	Deepika Dongre	APPLIED MACHINE LEARNING AND DATA SCIENCE from 2021-05-17 to 2021-05-21 5 days
10	Pankaj Sonawane	Research Methods in Science, Engineering & Technology May 2-6, 2021
11	Aniket Kore	<ol> <li>FDP on Essentials of Linux system administration- 2days (16-17 April 2021)</li> <li>Applications of Microsoft Power Automated &amp; Virtual Assistance for AI Education Bots- 5th June 2021</li> </ol>





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# **5. STUDENTS'ACHIEVEMENTS**

T.E.			
Sr. No.	SAP ID	Name	Achievements
1	60004180017	DEEP GANDHI	Chapter "Application of Deep Learning in Cartography using UNET and Generative Adversarial Network" published in "Design of Intelligent Applications using Machine Learning and Deep Learning Techniques" (Chapman and Hall/CRC)
2	60004180062	NEMIL SHAH	Published paper on Cloud Computing Technologies for Smart Healthcare and Agriculture
3	60004180117	VARUNDEEPSINGH NAGPAL	<ul> <li>Winner of Penned Thoughts 2.0 by Rgvtuan.</li> <li>Finalist in case study competition by Spjimr College</li> </ul>
4	60004180086	RUSHABH CHHEDA	Paper "3D Map Generator" published in DJ Strike 2021 Magazine (ISBN: 978- 93-5437-776-1)
5	60004180106	SIDDHARTH TRIVEDI	Paper "Digitized railway ticket verification using facial recognition", published in CONFERENCE: 2021 5th International Conference on Intelligent Computing and Control Systems (ICICCS) (in IEEE Xplore)



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B.E.					
Sr. No.	SAP ID	Name	Achievements		
1	60004170044	Hrishikesh Shenai	Paper published on Improving image based dialog by reducing modality biases, Springer ICACDS		
2	60004170069	MUSKAN GOENKA	Chapter "Application of Deep Learning in Deforestation Control & Prediction of forest fire calamities" published in CRC Book ,"Design of Intelligent System using Machine Learning and Deep Learning"		
3	60004170103	SHAIL SHAH	Paper "A Hybrid Approach for Landmark Recognition using Deep Local Features and Residual Network" published in ICACC 2021		
4	60004170022	CHINMAY KHAMKAR	Pneumonia Detection Using X-ray Images and Deep Learning - Information and Communication Technology for Competitive Strategies (ICTCS 2020)		
5	60004170012	Ankit Gupta	Chapter "Application of Steganography for Secure Data Transmission Using Lossless Compression" published in "Multidisciplinary Approach to Modern Digital Steganography"		
6	60004170096	ROMIL SHAH	Design of intelligent applications using Machine learning and deep learning techniques		
7	60004170061	Kylyn Fernandes	Wrote a chapter "Steganography Types and its Working" for the book "Multidisciplinary Approach to Modern Digital Steganography"		

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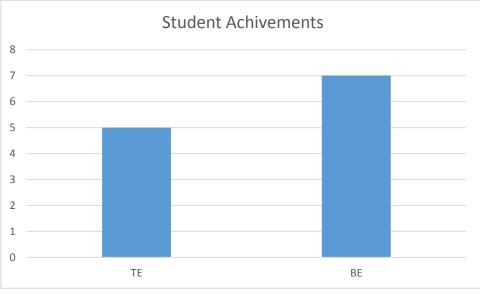




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## **STUDENTS COUNT**

Sr. No.	Class	No of students
1	TE	5
2	BE	7



**Student Activities Analysis** 



Shri Vile Parle Kelavani Mandal's **DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING** (Autonomous College Affiliated to the University of Mumbai)

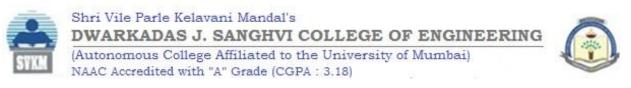
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## 6. PLACEMENT DATA

Sr.No	Name of Company	Total Number of Students Placed	Total Package in LPA
1	Accolite	8	9-11
2	Cimpress	4	12
3	Dolat Capital	2	11.5
4	JP Morgan Chase & Co.	10	14
5	Morgan Stanley	2	25.33
6	Tresvista	2	6.4
7	ZS Associates	2	8.9
8	Edelweiss	2	7
9	Interactive Brokers	3	9.35
10	Quantiphi	17	8.5
11	RBL BANK	2	9
12	TCS DIGITAL	13	7.3
13	LTI	18	5,6.5
14	TCS ninja	16	3.6
15	Oracle	4	5.2
16	Jio	2	4
17	Amdocs	5	5
18	Billdesk	4	5
19	Cognizant	9	4
20	Visible Alpha	3	6
21	Infosys	1	3.6
22	EY	1	4.5
23	LTFS	1	6
24	NSE	3	5.5
25	HCL	2	3.5
26	AGR	1	4
27	L &T	1	6.5
	TOTAL	137	



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No of Students Placed in Normal, Dream and Super Dream Companies

