Somaiya Vidyavihar University

Name: **Avani M. Sakhapara**		**E-mail:** **avanisakhapara@somaiya.edu**
Contact No: **9220309367**		
Department/Section: Information Technology		
College: K J Somaiya College of Engineering		
DOJ Somaiya: 01 Aig 2009	Career Experience:__15_ Yrs	Industry Experience:__0_Yrs	Teaching Experience:__15_Yrs
Present Academic Designation: Assistant Professor		Present Administrative Designation: NA

Area of research/specialization and Courses Delivered

Research domain/interests/areas
1. Machine Learning
2. Natural Language Processing
3. Virtual Reality
4. Augmented Reality
5. Blockchain
6. Competitive Programming

Courses Delivered
1. Analysis of Algorithms
2. Web Application Development
3. C
4. C++
5. Java
6. Python
7. Competitive Programming

Recognition as a teacher by any University	UG: Yes	PG: No	Ph.D : No

Details of Recognitions
1. Recognition by UGC and Somaiya Vidyavihar University

Education

Examination	Name of the Degree	University/Board	Institute/College	Year	CPI/SPI/ %Marks
PG	ME in Computer Engineering	Mumbai University	K J Somaiya College of Engineering	2015	70%
UG	BE in Information Technology	Mumbai University	Thakur College of Engineering and Technology	2008	62.8%

Notable Experience Details

Sr. No	Name of the organization	Designation	Date of Joining	Date of Leaving	Experience (Years)
1.	K J Somaiya College of Engineering	Assistant Professor	01 August 2009		15

Somaiya Vidyavihar University

Research Accomplishments and Projects	
No of students pursuing Ph.D as on date: NA	No of students completed Ph.D as on date: NA
No of students completed PG thesis / Project work as on date: NA	No of students / groups completed UG projects as on date: 30 groups
Publications Total:	Number of Peer review Journal papers:	Number of Conference papers:

Details of Publications:

International Journals

1. Dipti Pawade, Avani Sakhapara, Raj Shah, Siby Thampi, Vignesh Vaid. "Blockchain Based Secure Traffic Police Assistant System ", International Journal of Education and Management Engineering (IJEME), Vol.10, No.6, pp.34-41, 2020. DOI: 10.5815/ijeme.2020.06.05, Dec 2020

2. Dipti Pawade, Avani Sakhapara, Sanyogita Parab, Divya Raikar, Ruchita Bhojane, Henali Mamania, "Literature Survey On Automatic Code Generation Techniques", i-manager's Journal on Computer Science (JCOM), Vol. 6, Issue 2, Pp. 25-32, June - August 2018.

3. Dipti Pawade, Avani Sakhapara, Mansi Jain, Neha Jain, Krushi Gada, "Story Scrambler – Automatic Text Generation Using Word Level RNN-LSTM", International Journal of Information Technology and Computer Science(IJITCS), Vol.10, No.6, pp.44-53, 2018. DOI: 10.5815/ijitcs.2018.06.05.

4. Dipti Pawade, Avani Sakhapara, Maheshwar Mundhe, Aniruddha Kamath, Devansh Dave, "Augmented Reality Based Campus Guide Application Using Feature Points Object Detection", International Journal of Information Technology and Computer Science(IJITCS), Vol.10, No.5, pp.76-85, 2018. DOI: 10.5815/ijitcs.2018.05.08.

5. Dipti Pawade, Sagar Jape, Rahul Balasubramanian, Mihir Kulkarni, Avani Sakhapara,"Distributed Ledger Management for an Organization using Blockchains", International Journal of Education and Management Engineering(IJEME), Vol.8, No.3, pp.1-13, 2018.DOI: 10.5815/ijeme.2018.03.01

6. Abhi Vora, Vaibhav Chincholkar, Omkar Lad, Prof. Avani Sakhapara, "Controlling of a Toy Car using an Android Device (Motor Droid)", International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE) (2278-1021), March 2017, Volume 3, Issue 3, Page No: 926 – 929.

7. Anuj Thaker, Chinmay Sawant, Nikhil Patel, Prof. Avani Sakhapara, "Efficient Algorithm Comparison To Solve Sudoku Puzzle ",International Journal of Advance Foundation and Research in Computer (IJAFRC) (2348 – 4853), May 2015, Volume 2, Issue 5

8. Aditya Nayak, Narayan Acharya, Amanpreet Singh, Prof. Avani Sakhapara, Bharat Geleda, "Visualization of Mechanics Problems based on Natural Language Processing ",International Journal of Computer Applications (IJCA) (0975 – 8887), April 2015, Volume 116– No14, Page No: 34-37

9. Kalash Dave, Mayur Rathod, Parth Sheth, Prof. Avani Sakhapara, "Comparing the Performance of Frequent Itemsets Mining Algorithms" ,International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE) (2320-9798), March 2015, Vol. 3, Issue 3

10. Avani Sakhapara, Prof. Bharathi H.N., "Comparative Study of Apriori Algorithms for Parallel Mining of Frequent Itemsets", International Journal of Computer Applications (IJCA) (0975 – 8887), March 2014, Vol 90 – No 8, Page No: 21-24

Conferences

1. Avani Sakhapara and Dipti Pawade,""Design and Implementation of an Assessment Procedure to Combine Benefits of Collaborative Learning with 3-2-1 Strategy"", International Conference on Technology 4 Education 2023 (T4E 2023), organized by IIT Bombay, 24-26 November 2023 (proceedings will be published in IEEE)

2. Dipti Pawade, Avani Sakhapara, Abhijeet Pasi and Mishtee Gandhi, ""AlgoComp:

Visualization Tool for Path Finding Algorithms"", International Conference on Technology 4 Education 2023 (T4E 2023), organized by IIT Bombay, 24-26 November 2023 (proceedings will be published in IEEE)

3. Dipti Pawade, Avani Sakhapara, Mayank Kulkarni, Aditya Phatak, Divya Nair and Vedashree Joshi, ""Notes Generation From Videos"", International Conference on Technology 4 Education 2023 (T4E 2023) organized by IIT Bombay, 24-26 November 2023 (proceedings will be published in IEEE)

4. Dipti Pawade, Avani Sakhapara, Smit Thakare, Mihir Subramaniam and Riya Thapar, "Extractive approach for research paper summarization", 8th International Conference on Data Management, Analytics & Innovation, organized by VIT Vellore, India, 19- 21 January, 2024, Proceedings in Springer Lecture Notes in Networks and System

5. Avani Sakhapara, Sahil Hate, Jash Mehta, Dipti Pawade, Niti Shah, Arya Shah, "Government Scheme Suggester for Probable Successful Startup using Hybrid Intelligence" 4th International Conference On Smart Systems: Innovations In Computing, Organized By School Of Information Technology,Manipal University Jaipur.October 26-27, 2023, Springer Book Series-Smart Innovation, Systems and Technologies.

6. Kevin Joshi, Kaushal Binjola,Rajas Bondale, Avani Sakhapara, Dipti Pawade, "Estimation Of Crypto Net Worth Using Zero Knowledge Proof", 6th International Conference on Advances In Science and Technology (ICAST-2023), organized by K J Somaiya Institute of Technology, Sion, 8-9 December 2023, proceedings in IEEE"

7. Avani Sakhapara, Dipti Pawade, Ankita Patil, Naitik Rathod, Mohit Vadsak, Aagam Shah, "Generation of Indian Sign Language Animation from Audio and Video Content using Natural Language", 6th International Conference on Data Management, Analytics & Innovation (ICDMAI 2022), ,Pune, 4-6 January 2022, Proceeding to be published in Springer Lecture Notes on Data Engineering and Communications Technologies

8. Dipti Pawade, Avani Sakhapara, Isha Joglekar, Deepanshu Vangani, "Implementation of Open Domain Question Answering System", 6th International Conference on Data Management, Analytics & Innovation (ICDMAI 2022), ,Pune, 4-6 January 2022, Proceeding to be published in Springer Lecture Notes on Data Engineering and Communications Technologies

9. Dipti Pawade, Avani Sakhapara, Riya Rege, Sparsh Gupta, Hardik Jain, Kevin Joshi, "Meditation Therapy for Stress Management Using Brainwave Computing and Real Time Virtual Reality Feedback", 6th International Conference on Data Management, Analytics & Innovation (ICDMAI 2022), ,Pune, 4-6 January 2022, Proceeding to be published in Springer Lecture Notes on Data Engineering and Communications Technologies

10. Dipti Pawade, Avani Sakhapara, Sana Pagarkar, Swati Pandey, Kajal Shethia, Harsh Vasa, "QAudious: An Question Answering System for Academic Lecture Recordings", International Conference on Recent Trends in Computing (ICRTC 2021), June 4th -5th, 2021, Department of Computer Science Engineering, SRM Institute of Science and Technology Delhi-NCR Campus, Ghaziabad.

11. Avani Sakhapara, Dipti Pawade, Baiju Dodhia, Jigar Jain, Omkar Bhosale, Onkar Chakrawar, "Summarization of Tweets Related to Disaster", International Conference on Recent Trends in Computing (ICRTC 2021), June 4th -5th, 2021, Department of Computer Science Engineering, SRM Institute of Science and Technology Delhi-NCR Campus, Ghaziabad, Proceedings in Springer Book Series on "Lecture Notes in Networks and Systems" (LNNS)

12. Dipti Pawade, Avani Sakhapara, Chaitya Shah, Ankitmani Tripathi, "E-Certi : Design and Implementation of MVT Architecture based E-certificate Generation System", The second International Conference on Advances in Distributed Computing and Machine Learning (ICADCML-2021), 15-16 Jan 2021, Siksha 'O' Anusandhan, Bhubaneshwar, India.

13. Dipti Pawade, Avani Sakhapara, "Hybrid Shoulder Surfing Attack Proof Approach for User Authentication", The International Conference on Recent Trends in Communication & Intelligent Systems (ICRTCIS 2020), 26-27 September, 2020 Arya College of Engineering & IT, Kukas, Jaipur, Rajasthan, India.

14. Dipti Pawade, Avani Sakhapara, Rishi Ghai, Shruthi Sujith, Sneha Dama, "Automated Scoring System for Online Discussion Forum using Machine Learning and Similarity Measure" 2nd International Conference on Advanced Computing Technologies and Applications 2020, Mumbai, 28-29 Feb, 2020, Proceedings in Algorithms for Intelligent Systems. Springer, Singapore.
15. Krupalu Mehta, Avani Sakhapara, Dipti Pawade, Vivek Surve, "Novel Approach of Computing Optimal Placement of Solar Panel Using Augmented Reality "2nd International Conference on Advanced Computing Technologies and Applications 2020, Mumbai, 28-29 Feb, 2020, Proceedings in Algorithms for Intelligent Systems. Springer, Singapore.
16. Dipti Pawade, Avani Sakhapara, Chaitya Shah, Jigar Wala, Ankitmani Tripathi, Bhavikk Shah," Text Caption Generation Based on Lip Movement of Speaker in Video using Neural Network" 3rd International Conference on Advances in Computing and Data Sciences, Inderprastha Engineering College, Ghaziabad, Uttar Pradesh, India, April 12-13, 2019, Proceedings in Springer Communications in Computer and Information Science (CCIS).
17. Dipti Pawade, Avani Sakhapara, Hussain Ratlamwala, Siddharth Mishra, SamreenShaikh, Dhrumil Mehta,"Implementation of Smart Legal Assistance System in Accordance with the Indian Penal Code Using Similarity Measures", International Conference on Advances in Computing and Data Sciences (ICACDS 2019), April 2019, Proceeding in Springer
18. Dipti Pawade, Avani Sakhapara, Chaitya Shah, Jigar Wala, Ankitmani Tripathi, Bhavikk Shah, "Text Caption Generation Based on Lip Movement of Speaker in Video Using Neural Network", International Conference on Advances in Computing and Data Sciences (ICACDS 2019), April 2019, Proceeding in Springer
19. Dipti Pawade, Avani Sakhapara, Aishwarya Badgujar, Divya Adepu, Melvita Andrade,"Secure Online Voting System using Biometric Authentication with Blockchain", 3rd International Conference on Data Management, Analytics and Innovation (ICDMAI 2019), Kuala Lumpur, Malaysia, January 2019, Proceeding in Spinger
20. Avani Sakhapara, Dipti Pawade, "Novel Teaching Strategies for Lab-Centric Courses:Case Study of Programming Course", IEEE Ninth International Conference on Technology for Education (T4E), Indian Institute of Technology, Chennai, December 2018, Proceeding in IEEE
21. Avani Sakhapara, Prof. Dipti Pawade, Mr.Saumil Dedhia, Ms. Twinkle Bhanushali, Mr.Vinit Doshi, "Machine Learning Based Approach for Person Identification in Group Photos", Fourth International Conference on Computing Communication Control and Automation (ICCUBEA 2018), Aug 2018, Proceeding in IEEE
22. Prof. Avani Sakhapara, Prof. Dipti Pawade, Ms. Bhakti Chaudhari, Mr.Rishabh Gada, Mr.Aakash Mishra, Ms.Shweta Bhanushali, "Subjective Answer Grader System Based on Machine Learning", International Conference On Soft Computing and Signal Processing (ICSCSP 2018), June 2018, Proceeding in Springer
23. Prof. Dipti Pawade, Prof. Avani Sakhapara, Ms. Melvita Andrade, Ms.Aishwarya Badgujar, Ms.Divya Adepu, "Implementation of Fingerprint Based Authentication System using Blockchain", International Conference On Soft Computing and Signal Processing (ICSCSP 2018), June 2018, Proceeding in Springer
24. Prof. Dipti Pawade, Prof. Avani Sakhapara, Ms.Sanyogita Parab, Ms.Divya Raikar, Ms.Ruchita Bhojane, Ms.Henali Mamania,"Automatic HTML Code Generation from Graphical User Interface Image", Third International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT 2018), May 2018, Proceeding in IEEE
25. Prof. Avani Sakhapara, Prof. DiptiPawade, Mr.HardikChapanera, Mr.HarshalJani, Mr.DarpanRamgaonkar,"Segregation of Similar and Dissimilar Live RSS News Feeds based on Similarity Measures", International Conference on Data Management, Analytics and Innovation 2018 (ICDMAI 2018), IICMR, Nigdi, Pune, 19-21 January 2018, Proceeding in Springer AISC Series
26. Prof. Avani Sakhapara, Prof. Dipti Pawade, Ms. Priyanka Sharma, Mr. Rushabh Dalia,

Ms.Shriya Khandelwal, "Animation based Hybrid Shoulder Surfing Attack Proof Approach for User Authentication",Third International Conference on Computing, Communication, Control and Automation (ICCUBEA 2017),Pimpri Chinchwad College of Engineering (PCCOE),Pune, 17-18 August , 2017

Books/Book Chapters
1. First Step towards Search Engine Optimization" First edition, LAP LAMBERT Academic Publishing (May, 2018), ISBN- 978-613-9-83042-8

Patents/Copy Rights
1. Received copyright from Copyright office, Government of India for "IgniteDE : Dedicated IDE for CodeIgniter" , an IDE to develop CodeIgniter application, having registration number SW-11649/2018

No of Research / consultancy / projects completed: 02 Rs: 45000 + 3,68,632	No of Research / consultancy / projects on-going: Rs:	No of Research / consultancy / projects on applied as on date: Rs:

Details of Research / consultancy / projects:
Completed
1. Completed consultancy project on "IUCEE Website Redesign Project" from June 2019 to March 2020 (3,68,632)
2. Completed Mumbai University approved Minor Research Grant Project on "Fraud Detection and Monitoring of Water Tankers using IoT based System" for Academic Year 18-19 (Rs. 45000)

IPR/ Copyrights
1. Received copyright from Copyright office, Government of India for "IgniteDE : Dedicated IDE for CodeIgniter" , an IDE to develop CodeIgniter application, having registration number SW-11649/2018

FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered

Attended
1. FDP on "Machine Learning" 7 Dec – 11 Dec 2022, Sinhgad Institute of Technology, Lonavala
2. FDP on "Internet of Things – Industry 5.0", 20 Feb – 24 Feb 2023, Sinhgad Institute of Technology, Lonavala
3. IP Awareness/Training Program, 06 Apr 2023, Intellectual Property Office, India
4. Workshop on " MS Teams Assets",30 Dec 2021,organized by IQAC KJSCE
5. Workshop on "cyber forensics and cyber security",20 Dec – 25 Dec 2021 Online, Conducted by Yashwantrao Chavan College of Engineering
6. FDP on "Current Trends in Industry"02 May - 08 May 2020 Online , Conducted by Dr. D.Y. Patil Institute of Engineering, Management and Research, Pune
7. FDP on "Research, Funding, Projects and IPR", 07 June – 09 June 2021 Online, Conducted by K.C. College of Engineering and Management
8. IIEECP Phase-II, January 2019 - May 2019,Conducted by IUCEE
9. IIEECP Phase-1 Workshop, 18 December - 20 December 2018, Conducted by IUCEE at K.J. Somaiya College of Engineering, Mumbai
10. Training Program on "Burp Suite- Web Application Security tool" 04 September-05 September 2018, at K.J. Somaiya College of Engineering, Mumbai
11. Workshop on "Use of Learning Technologies in Engineering Education" in 18th International Conference on Advanced Learning Technology (ICALT-2018) , 9 July - 13 July 2018 IIT Bombay

12. FDP on "FDP301x Mentoring Educators in Educational Technology" , 17 May - 27 June 2018 Conducted by IIT Bombay, at K. J. Somaiya College of Engineering, Mumbai
13. FDP on "FDP201x Pedagogy for Online and Blended Teaching-Learning Process", 14 September - 12 October 2017, Conducted by IIT Bombay, at K. J. Somaiya College of Engineering, Mumbai
14. FDP on "FDP101x Foundation Program in ICT for Education" , 27 July - 07 September 2017 Conducted by IIT Bombay, at K. J. Somaiya College of Engineering, Mumbai
15. ISTE Approved STTP on "Digital Security" 27 June - 02 July 2016, K. J. Somaiya College of Engineering, Mumbai
16. ISTE Approved Workshop on "Frameworks", 05 and 19 March 2016, K. J. Somaiya College of Engineering, Mumbai
17. ISTE Approved STTP on "Internet of Things", 04 January - 08 January 2016, K. J. Somaiya College of Engineering, Mumbai
18. ISTE Approved STTP on "Computer Programming" , 16 July - 21 December 2015, Conducted by IIT Bombay in Blended Mode(MOOCs)
19. ISTE Approved STTP on "Structured Programming Approach", 31 December 2012- 05 January 2013 at Sardar Patel Institute of Technology, Mumbai
20. Workshop on "SCILAB - An Open Source Platform for Numerical Computation",13 June - 17 June 2011 at K. J. Somaiya College of Engineering, Mumbai(in collaboration with IIT Bombay)
21. ISTE Approved Workshop on "Database Management Systems"   13 December - 23 December 2010, Conducted by IIT Bombay, at K.J. Somaiya College of Engineering, Mumbai

Organized
1. Session on Advanced Excel Skills for faculty and staff of department, 31 March 2023 (coordinator)
2. Training session on Power BI for faculty and staff of department, 3 April 2023 (coordinator)
3. Seminar on Introduction to SoftwareTesting for SYIT students, 26 Nov 2022 (coordinator)
4. Session on Journey from Contest Designing to Contest Hosting: Competitive Programming Approach for faculty of KJSCE, 12 march 2023 (coordinator)
5. Seminar on Optimization in the field of Data Science with Competitive Programming for SYIT students
6. Seminar on Guide to Finding andUnderstanding Research Papers for SYIT students
7. Organized Industry expert session on Use of contemporary tools for testing program for SYIT students and faculty members of department on 30 Oct 2021 (coordinator)
8. Organized E-Quiz on Safe and Responsible Internet Usage on occasion of Safer Internet Day on 24 Feb 2021(organizing committee member)
9. Organized online session on Getting started with competitive programming on 11 Nov 2020 for SYIT students and faculty members of department(coordinator)
10. Organized Phase-1 of pitch video submission and Phase-2 of 36-hour SIH-KJSCE Internal Hackathon for nomination of teams for Smart India Hackathon 2020 (KJSCE SPOC)
11. Organized Industry expert Seminar on "An Insight into Java Spring Framework" for TYIT students on 20 March 2019(coordinator)
12. Organized Orientation of second year students of department for Smart India Hackathon(compere and speaker)

Delivered
1. Invited as Mentor for E-Summit 2022 oranized by KJSCE Bloombox
2. Invited as Mentor for HackerBash 2021 organized by CSI-KJSCE, 27-28 Feb 2021
3. Delivered seminar on "Getting Started with CodeIgniter" at Department of Computer Engineering, at Vishwatmak Om Gurudev College of Engineering (VOGCE), Mohili, 18 Feb 2021
4. Delivered seminar on "Web Application Development Frameworks" at Department of Computer Engineering, at Vishwatmak Om Gurudev College of Engineering (VOGCE),

Mohili, 03 Feb 2021

5. Delivered session on "Significance of Literature Review in defining a Problem Statement for Project, KJSCE, Mumbai, 24 February 2020

6. Delivered IUCEE Webinar on "Transformations at KJSCE using Opportunities with IIT Bombay" on 16 October 2019

7. Delivered seminar on "Problem Solving Using Java" for third and final year B.Tech. on 19,20, and 23 August 2019, Electronics Department, KJSCE, Mumbai

8. Contributed as Mentor and Judge for "Ennovate'19 Competition" at BloomBox (E-CELL of KJSCE), Mumbai, 05 April 2019

9. Delivered seminar on "How to Prepare for Coding Test in Placements" for third and final year B.Tech. from 08 August 2018, Electronics Department, KJSCE, Mumbai

10. Presented case study on "Teaching Methodology For Programming Courses" in Faculty Conclave 2018 on July 14, 2018 at KJSCE, Mumbai

11. Conducted Workshop on "Java from Placement Perspective" for third and final year B.Tech students, in Electronics Department, at K. J. Somaiya College of Engineering, Mumbai, 05 -16 August 2017

12. Conducted Workshop on "Java Programming" for First year M.Tech students, in Electronics Department, at K. J. Somaiya College of Engineering, Mumbai, 13 -25 January 2017

	Notable Key Scholastic Achievements
1.	Mentored team of First year students of KJSCE and SKSC, for Haryana Police Hackathon organized by Haryana Police, Haryana State Narcotics control bureau , Team won First Runner Up Prize
2.	Mentored team of third year students for Smart India Hackathon 2023 organized by Ministry of Education,GOI, Team was declared as winner
3.	Mentored team of third year students for KAVACH 2023 - Cyber Security Hackathon, organized by Ministry of Education,GOI, Team was declared as winner
4.	Received third prize for paper titled "Implementation of Open Domain Question Answering System" in ICDMAI 2022 conference
5.	Received Best Performing Teaching Learning Center award by IUCEE in Jan 2021
6.	Received KJSCE ISTE best paper award 2020
7.	Mentored college team BITSTREAM which participated in Smart India Hackathon 2019 at Kolkata and team was nominated in top 6 teams
8.	Mentored college team FaSHION which participated in Smart India Hackathon 2018 at Pune and won Second Runner up prize
9.	Top 241 participants among total of 5038 participants in FDP101x and FDP201x
10.	Received KJSCE ISTE best paper award 2017

	Notable Positions and Responsibility
1.	Department Coordinator of Project Competition Cell
2.	Coordinator for Teaching and Learning Center of the Institute
3.	Project committee member of the Department
4.	Faculty coordinator for KJSCE Codecell

Date: 06 / 10 / 2024   **Signature of Faculty Member**