#### **SUPRIYA KAMOJI**

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**OBJECTIVE:** To impart the best quality technical skills & knowledge to students. This would build confidence in the students & enable them to take up challenging careers & assignments.

Presenting 20+ Years' varied exposure in Education domain.... Track Record of Success in....

# **Profile Summary**

Dedicated Engineering Professor with strong record in both teaching and administration. Proficient in explaining complex Engineering theories in clear and accessible manner. Skilled in development and implementation of educational technology tools and applications in the classroom.

- Expertise in designing course content in domain of computer Engineering as per NEP and Bloom's Taxonomy.
- Educational Technology Expert in domain of Machine Learning, Deep Learning and cloud computing.
- Diverse teaching modalities.
- Resource person for the technical talks for the students and faculty members.
- Adept in organizing various International and national level technical and non-technical events for faculty and students.
- Skilled academic mentor
- Published 20+ technical research papers in reputed International Journals and Conferences.

1. Experience			
INSTITUTE (1):	FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING(F.R.C.R.C.E), BANDRA(W)		
DESIGNATION:	ASSISTANT PROFESSOR		
DURATION:	JULY 2005 - TILL DATE		
RESPONSIBILITY:	Teaching, mentoring, Course Coordinator, Member of syllabus design committee for Mumbai university, Placement Coordinator, Research Assistant		
INSTITUTE (2):	B.V.B. COLLEGE OF ENGINEERING AND TECHNOLOGY COLLEGE IN HUBLI, KARNATAKA, INDIA		
DESIGNATION:	LECTURER		
DURATION:	2002 – 2005		
RESPONSIBILITY:	Teaching, Mentoring, Course Coordinator		

#### 2. Education

DEGREE	COLLEGE	UNIVERSITY	YEAR	PERCENTAGE	Class
Ph.D. (COMPUTER ENGINEERING)	SIR PADAMPAT SINGHANIA UNIVERSITY	UDAIPUR	2023	-	
M.E (COMPUTERS)	THADOMAL SHAHANI COLLEGE OF ENGG	MUMBAI	2011	73.1%	DISTINCTION
B.E (E & C)	SDMCET, DHARWAR	KARNATAKA	2000	71%	DISTINCTION

## 3. Key Responsibilities handled

- NIRF Coordinator till date: Filling the prerequisite form and collecting compiling data required for NIRF.
   Making the analysis of previous years data to frame action plans for improvement in the scores in the next year.
- BE Project Coordinator till date: Arranging orientation sessions for project topic selection, scheduling mid term presentations of BE projects and calculation outcome of project.
- Coordinator of Fr. Conceicao Rodrigues Memorial Debate (CRMD) 2019 and 2018 A national level event. Fr. Conceicao Rodrigues Memorial Debate is a National level event, fondly called as CRMD usually conducted in the month of September of every year. CRMD gives students creative room to express their views and serves as a platform where they can articulate their thoughts, showcase their debating skills and fulfil their appetite for more information.

## • Coordinator for the college cultural festival 2017-18

The most awaited festival of the college which has lots of fun, music, drama, and dance called Euphoria. It is a 3-day long festival give an opportunity to the students to showcase their talents in various fields like literature, personality, gaming, performing arts etc.

• Department placement in-charge 2014-2016 and 2019 till date

Mentoring the students for the placement drives, framed the placement policies, collected the technical sample questions after every company visit and uploaded on the portal for the reference of junior students. Organized talks from senior students for preparation of interviews and higher studies. Compiled the final placement statistics and graphical charts.

 Organized various ISTE approved Short Term Training Programmes (STTP), Student Development Programme(SDP) and Faculty Development Programmes(FDP)

Organized various training programmes by Identifying the thrust areas in the field of computer Engg field, which is a combination of Expert's Speeches & Practical Demonstrations by eminent personalities from Industry and Academia. Such training programmes are aimed to upgrade the knowledge of teachers who are teaching various disciplines of science and engineering subjects in colleges or Universities, to the students for meeting the current requirements of IT industry and for research scholars to conduct their research work.

In-charge of Identifying the weak and strong students

In regular interval, identify weak students using tools such as test, quiz, Module test and assignment. Designed additional resource materials to improve their performance. Providing guidance to students for developing their career as well as making them familiar with different career opportunities.

4. Curriculum Development Experience

- 1. Subject: Cloud Computing skill Development lab- VI Semester Computer Engg, January 2022
  Responsibility: Designed the course contents for the skill development of students in the domain of cloud computing. Course content included framing the list of experiments, creating the instructional manual, slides/PPT and video contents for each experiment.
- Subject: Structured Programming Approach- II Semester Engg, January 2021 and 2019
   Responsibility: Designed the lecture plan, list of experiments and slides/PPT, Designed and Conducted the online coding tests on hacker rank.
- 3. Subject: Competitive Coding and Advanced Coding—III and V semester Computer Engg- 2017 & 2018
  Responsibility: Framed the syllabus and designed challenging problem statements to enhance the coding skills of the students which help them in placement drives.
- 4. Subject: Computer Organization and Architecture- IV Semester Computer Engg-2016-17 Responsibility: Designed the syllabus and practical list. Conducted the Orientation programme for the faculty members of Mumbai University to transfer the practical knowledge of Computer Organization and Architecture.
- 5. Subject: Preplacement Preparation 2014 to 2016 and 2019 to 2022.
  Responsibility: Collaborated with subject matter experts to update the students on the procedures, processes, and company specific training (Technical and Aptitude). Designed the content and timeline framework for technical and Aptitude training for placement drives. Organized the alumni preplacement

framework for technical and Aptitude training for placement drives. Organized the alumni preplacement talks and mock interviews, collected feedback on students preparedness to improve the curriculum content and placement statistics.

5. Resource Person in Training Program					
		Academic	Participant /	Duration	
Sr. no	Program Details	Year	Resource	(2weeks/	
31.110	_	Person	Person	1week/days)	
1	Virtual Lab on computer Organization and architecture	2016-17	Resource	2 days	
			Person		
2	"Machine Learning" in Shah and Anchor Kutchhi college of	2019-20	Resource	1 week	
	Engg, organized on 2nd and 16th march, 2019.		Person		
3	Cloud Computing	2021-22	Resource	2days	
			Person		
4	Research Methodology	23-24	Resource	2 days	
			Person		

6. Funded R & D Projects and Consultancy work				
Sr. no	Funding Agency	Number of Projects		
1	Mumbai University( Minor Research Grant Projects)	3		
2	eFSI (IIT Project) IIT (Bombay)	1		

7. Enhancement of Qualification						
Sr. No	Title of the Degree Academic Duration		University/			
		Year		Institute		
1	NPTEL Course on Cloud Computing	2017-2018	1 week	IIT Khargapur		
2	NPTEL Course on Soft Skills	2017-2018	1 week	IIT Khargapur		

NPTEL Course On data mining	2018-2019	1 w	eek	IIT Khargapur
NPTEL Course Compiler construction	2019-2020	1 w	eek	IIT Khargapur
Certification Course Convolutional Neural Network (CNN)	2019-2020	1 w	eek	Coursera
Certification Course Neural Network	2019-2020	1 w	eek	Coursera
Certification Course Structuring ML Projects	2019-2020	1 w	eek	Coursera
Certification Course Programming for everybody	2019-2020	1 w	eek	Coursera
Certification Course Sequence Models	2020-2021	1 w	eek	Coursera
Sales Force Fundamentals	2022-2023	2 d	ays	FDP
Generative AI : Concerns and Solutions	2023-2024	1 w	eek	ATAL
8. F	Research Publication	s		
Number of Research Publica	ations in Internation	al		13
Journal	s			
Number of Research Publica	ations in Internationa	al	14	
Conferen	ces			
Publication Details			Academic	Author/ Co-
		Year	Author	
Performance Analysis of Various Window Sizes for Colorization of Grayscale Images using LBG and KFCG Vector Quantization Codebooks in RGB and Kekre's LUV Color Spaces International International Journal of Soft Computing and Engineering (IJSCE)				Author
ISSN: 2231-2307 Volume-1 Issue-4	Sentember 2011			
ISSN: 2231-2307, Volume-1 Issue-4, Comparative study of Techniques us	•	Selfish		Co-
·	ed for Detection of states		2011	Co- Author
Comparative study of Techniques us Nodes in Mobile Adhoc Networks  International Journal of Soft Compu	ed for Detection of States ting and Engineering September 2011		2011	
Comparative study of Techniques us Nodes in Mobile Adhoc Networks  International Journal of Soft Compu ISSN: 2231-2307, Volume-1 Issue-4,	ed for Detection of String and Engineering September 2011 hms ience and Technolog	(IJSCE)	2011	Author
Comparative study of Techniques us Nodes in Mobile Adhoc Networks  International Journal of Soft Compu ISSN: 2231-2307, Volume-1 Issue-4,  Study of Cache Management Algorit Iternational Journal of Computer Sc ctober- December. 2011	ed for Detection of String and Engineering September 2011  hms ience and Technolog 9-4333(Print)  ous Pixel Windowsing LBG, KPE, KFCG	gy (IJCST).  Sizes for and KEVR	2011	Author
	NPTEL Course Compiler construction  Certification Course Convolutional Neural Network (CNN)  Certification Course Neural Network  Certification Course Structuring ML Projects  Certification Course Programming for everybody  Certification Course Sequence Models  Sales Force Fundamentals  Generative AI: Concerns and Solutions  8. F  Number of Research Publication Conferen  Publication I  Performance Analysis of Various W Grayscale Images using LBG an Codebooks in RGB and Kekre's LUV	NPTEL Course Compiler construction  Certification Course Convolutional Neural Network (CNN)  Certification Course Neural Network (CNN)  Certification Course Neural Network (Construction Network (Construction Network (Construction Network (Certification Course Neural Network (Certification Course Neural Network (Certification Course Neural Network (Certification Course Neural Neural Neuropean (Certification Course Neural Neuropean (Certification Course Neural Neuropean (Certification Course Neural Neuropean (Certification Course Neuropea	NPTEL Course Compiler construction  Certification Course 2019-2020 1 w Convolutional Neural Network (CNN)  Certification Course Neural 2019-2020 1 w Network  Certification Course Neural 2019-2020 1 w Structuring ML Projects  Certification Course 2019-2020 1 w Programming for everybody  Certification Course Sequence 2020-2021 1 w Models  Sales Force Fundamentals 2022-2023 2 d  Generative AI : Concerns and 2023-2024 1 w Solutions  Number of Research Publications in International Journals  Number of Research Publications in International Conferences  Publication Details  Performance Analysis of Various Window Sizes for Colorization of Grayscale Images using LBG and KFCG Vector Quantization Codebooks in RGB and Kekre's LUV Color Spaces International	NPTEL Course Compiler construction  Certification Course Convolutional Neural Network (CNN)  Certification Course Neural Network  Certification Course Neural Network  Certification Course Structuring ML Projects  Certification Course Programming for everybody  Certification Course Sequence Models  Sales Force Fundamentals  Sales Force Fundamentals  Sales Force Fundamentals  Number of Research Publications in International Journals  Number of Research Publications in International Conferences  Publication Details  Academic Year  Performance Analysis of Various Window Sizes for Colorization of Grayscale Images using LBG and KFCG Vector Quantization Codebooks in RGB and Kekre's LUV Color Spaces International

	Evaluation of Students Performance Based on Formative		Co-
5	Assessment	2013	Author
	International journal of Computer applications		
	DOI: 10.5120/11367-6623		
6	Key Frame Extraction for Video Summarization Using Motion Activity Descriptors International Journal of Engineering Research & Technology	2014	Co- Author
	elSSN:2319-1163		
	Dynamic Vehicle Traffic Management System IJRET-International		Co- Author
7	Journal of Research in Engineering and Technology	2015	Addioi
	eISSN: 2319-1163, pISSN: 2321-7308		
	Controversial analysis: Sentimental Analysis of Twitter data		Co-
	IJARCSSE	2017	Author
8	ISSN: 2277 128X		
9	Prediction of Cardiovascular Disease- A review Publication	2019	Co-
	IJRASET		Author
	ISSN: 2321-9653, DOI:10.22214		
10	Prediction of tourism flow in India Using LSTM Model	2019	Author
	Journal of Emerging Technologies and Innovative Research		
	DOI:http://doi.one/10.1729/Journal.20564		
11	Analysis of Growth and Planning of Urbanization and correlates changes in Natural Resources	2019	Author
	Springer and Scopus Indexed International Conference on Innovative Data Communication Technologies and Application (ICIDCA)		
	DOI: https://doi.org/10.1007/978-3-030-38040-3_23		
12	Image Processing based Vehicle Identification and Speed Measurement	2020	Author
	SCOPUS Indexed IEEE International Conference on Inventive Computation Technologies (ICICT-2020) DOI: 10.1109/ICICT48043.2020.9112552		
13	Video Anamoly Detection using 3 D Convolutional Network	2020	Author
	SCOPUS Indexed IEEE International Conference on Inventive Computation Technologies (ICICT-2020)		
	<b>DOI</b> : 10.1109/ICICT48043.2020.9112552		

14	Prediction of Parkinson's Disease using Machine Learning and Deep Transfer Learning from different Feature Sets	2021	Author
	6th International Conference on Communication and Electronics Systems (ICCES)		
	DOI: 10.1109/ICCES51350.2021.9488944		
15	Smart Street lamps A solution to Urban Pollution	2021	Author
	2nd International Conference on Inventive Research in Computing Applications ( ICIRCA)		
	DOI:10.1109/ICIRCA48905.2020.9182980		
16	Virtual assistance using question generation/ Answering	2021	Author
	4th IEEE Sponsored International Conference on Communication, Information and Computing Technology (ICCICT 2021)		
	DOI: 10.1109/ICCICT50803.2021.951013		
17	A Detection, Tracking and Alerting System for Covid-19 using Geo- Fencing and Machine Learning	2021	Co- Author
	IEEE Sponsored 5th International Conference on Intelligent Computing and Control Systems (ICICCS-21)		
	DOI: 10.1109/ICICCS51141.2021.9432254		
18	Analysis of Flood using GIS parameters in context of Sustainable Management	2022	Author
	Proceedings of the International Conference on Augmented Intelligence and Sustainable Systems (ICAISS-2022)		
	DVD Part Number: CFP22CB2-DVD; ISBN: 978-1-6654-8961-4		
19	A Framework for Flood Extent Mapping Using Cnn Transfer Learning.	2022	Author
	International Journal of Intelligent Systems and Applications in Engineering 10 (2022).		
20	Effective Flood prediction model based on Twitter Text and Image analysis using BMLP and SDAE-HHNN.	2023	Author
	Engineering Applications of Artificial Intelligence 123 (2023): 106365.		
21	Fusion of multimodal textual and visual descriptors for analyzing disaster response.	2023	Author
	5th International Conference on Smart Systems and Inventive Technology (ICSSIT). IEEE, 2023.		
22	Data analytics for disaster management response using sentiments.	2023	Author
	International Conference on Sustainable Computing and Smart Systems (ICSCSS). IEEE, 2023.		
23	Artificial intelligence enhanced content management systems: Integration, considerations, and useful examples.	2023	Author
	3rd International Conference on Pervasive Computing and Social Networking (ICPCSN). IEEE, 2023.		

24	First Aid and Emergency Assistance Robot for Individuals at Home using IoT and Deep Learning.	2023	Co-Author
	7th International Conference on Computing Methodologies and Communication (ICCMC). IEEE, 2023.		
25	A Privacy Preserving Sentiment Analysis using Federated Learning.	2024	Author
	Second International Conference on Inventive Computing and Informatics (ICICI). IEEE, 2024.		
26	Mental Health Prediction using Machine Learning Models and Large Language Model.	2024	Author
	Second International Conference on Inventive Computing and Informatics (ICICI). IEEE, 2024.		
27	Analysis of flood severity using intelligent deep networks and sentinel image for the Kerala region	2025	Author
	International Journal of Hydrology Science and Technology 19.1 (2025): 1-23.		

#### **Patents Published:**

1. Title: FloodKnow: A AI based hybrid system for flood severity prediction based on leveraging both textual and visual features using deep neural Network

**Application Number: 202221070479** 

2. Title: MULTIMODAL DISASTER RISK MANAGEMENT SYSTEM

Application Number: 202321027907

3. Title: EDU-VQA - A MULTIMODAL MULTI-KNOWLEDGE OPEN-DOMAIN VISUAL QUESTION ANSWERING MODEL

**FOR EDUCATION** 

Application Number: 202321027909

Place and Date: Mumbai Signature: Prof. Supriya Kamoji