



# Sinhgad Technical Education Society's SINHGAD INSTITUTE OF TECHNOLOGY

(Affiliated to SavitribaiPhule Pune University, Pune and Approved by, AICTE, New Delhi.)  
Gat No. 309/310 ,Kusgaon (Bk), off Mumbai –Pune, Expressway.  
Lonavala, Pune, 410401, Website : [www.sinhgad.edu](http://www.sinhgad.edu)

## Department of Computer Engineering

### ACADEMIC YEAR 2024-25

#### Vision and Mission of Institute

##### VISION

उत्तमपुरुषान् उत्तमाभियन्तृन् निर्मातुं कटीबध्दाः वयम्।

We are committed to produce not only good engineers but good human beings, also.

##### MISSION

Holistic development of students and teachers is what we believe in and work for. We strive to achieve this by imbibing a unique value system, transparent work culture, and excellent academic and physical environment conducive to learning, creativity, and technology transfer our mandate is to generate, preserve and share knowledge for developing a vibrant society.

##### VISION AND MISSION OF DEPARTMENT

##### VISION

We strive to produce globally competent computer professionals enriched with innovative skills and good moral values with societal concerns.

##### MISSION

M1: To provide broad-based education and contemporary knowledge by adopting modern teaching-learning methods.

M2: To inculcate a spirit of innovation in students through industrial interactions.

M3: To develop individual's potential to its fullest extent so that they can emerge as gifted leaders in their fields

##### PROGRAM EDUCATIONAL OBJECTIVES:

PEO 1: To prepare globally competent graduates having strong fundamentals and domain knowledge to provide effective solutions for engineering problems.

PEO 2: To prepare the graduates to work as committed professionals with strong professional ethics and values, a sense of responsibility, understanding of legal, safety, health, societal, cultural, and environmental issues

PEO3: To prepare committed and motivated graduates with a research attitude, lifelong learning, investigative approach, and multidisciplinary thinking.

PEO 4: To prepare the graduates with strong managerial and communication skills to work effectively as individuals as well as in teams.



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## Department of Computer Engineering

### 1. Faculty Details:

Sr. No.	Name of the Faculty Member	Qualification			Association with the Institution	Designation	Date on which Designated as Professor/ Associate Professor	Date of Joining the Institution	Department	Specialization
		Degree(Highest Degree)	University	Year of attaining higher qualification						
1	Mr. Babar Sachin Dilip	Ph.D	Aalborg University, Denmark	2015	18	Professor & Head	19-12-2016	07-01-2006	Computer Engg.	Wireless Communication
2	Ms. Patil Shubhangi Raju	Ph.D	LNCT,Bhopal	2007	14	Associate Professor	16-06-2010	16-06-2010	Computer Engg.	Computer Engg.
3	Mr. Nimbekar Shrikrishana Bhanudas	M.E	Sant Gadge Baba Amaravati University	2007	16	Associate Professor	12-08-2012	01-07-2008	Computer Engg.	Electronics
4	Ms. Dhote Bharti Laxman	M.E	Savitribai Phule Pune University, Pune	2012	15	Asst. Professor	-	01-01-2008	Computer Engg.	Computer Engg.
5	Mr. Patil Nagesh Keshvrao	M.E	Savitribai Phule Pune University, Pune	2019	16	Asst. Professor	-	16-06-2008	Computer Engg.	Computer Engg.
6	Mr. Chavan Vikram Madhukar	M.E	Savitribai Phule Pune University	2012	12	Asst. Professor	-	02-07-2012	Computer Engg.	VLSI & Embedded systems
7	Ms. Wagh Snehal Sitaram	ME	Savitribai Phule Pune University	2020	2	Asst. Professor	-	20-04-2022	Computer Engg.	Information Technology
8	Mr.Jordan Satish Choudhari	ME	Savitribai Phule Pune University	2020	2	Asst. Professor	-	13-06-2022	Computer Engg.	Information Technology
9	Mr. Mulani Karim Shahajhan	M.E.	Savitribai Phule Pune University, Pune	2017	6	Asst. Professor	-	28-08-2018	Computer Engg.	Computer Engg.
10	Ms. Surana Amruta Vijay	Ph.D	Glocal University	2023	1	Associate Professor	09-06-2023	09-06-2023	Computer Engg.	Computer Engg.



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11	Mr. Karlathe Basappa Vitthal	M.Tech.	Shivaji University	2020	1	Asst. Professor	-	06-07-2023	Computer Engg.	Computer Science & Technology
12	Mr. Mane Shriganesh Shridhar	M.E.	Savitribai Phule Pune University, Pune	2017	1	Asst. Professor	-	03-07-2023	Computer Engg.	Computer Science & Engineering
13	Ms. Dhumal Jyoti Rajesh	M.E.	Savitribai Phule Pune University, Pune	2014	1	Asst. Professor	-	14-08-2023	Computer Engg.	Computer Engg.
14	Mr. Vinod Y Ajankar	M.E	SRTMU, Nanded	2015	1	Asst. Professor	-	30-09-2023	Computer Engg.	Computer Engg.
15	Mr. Shinde Shreyas Shrimant	M.E	Savitribai Phule Pune University, Pune	2016	0	Asst. Professor		03-06-2024	Computer Engg.	Computer Engg.
16	Mrs. Monali Arun Bansode	M.E	Mumbai	2016	0	Asst. Professor		12-9-2024	Computer Engg.	Computer Engg.



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### 2. Faculty Activities:

#### 2.1. Faculty as participants in FDP/training activities/STTPs/FOP

Sr. No.	Name of Faculty	Name of Activity FDP/ STTP/ Workshop/ FOP/TTT	Level University/ State/National/ International	Title & short description	Date/ Duration	Venue
1	Ms.J.S.Chaudhary	Train the trainer	STES	Resource person for the subject Database Management system	24/06/24 to 28/06/24	SIT,Lonavala
2	Dr.A.V.Surana	TTT	STES	Resource person for the subject SPOS	24/06/24 to 28/06/24	SIT,Lonavala
3	Mr. K. S. Mulani	TTT	STES	Resource person for the subject CG	24/06/24 to 28/06/24	SIT,Lonavala
4	Mr.S S Mane	FDP	National	AI “Foundation Level”	20/07/2024 to 20/07/2024	MoE’s Innovation Cell
5	Dr.S.R.Patil	TTT	STES	Resource person for the Subject Theory of computation	24/06/24 to 28/06/24	SIT,Lonavala
6	Ms.S.S.Wagh	TTT	STES	Blockchain Technology	24/06/24 to 28/06/24	SIT,Lonavala
7	Mr.B.V.Karlathe	Train the trainer	STES	Resource person for subject HPC and SMA	24/06/24 to 28/06/24	Department of Computer Engineering,SIT, Lonavala
8	Dr.shubhangi R. Patil	Train the trainer	STES	Resource person for subject Artificial Intelligence	24/06/24 to 28/06/24	Department of Computer Engineering,SIT, Lonavala
9	Mr. Vikram M. Chavan	TTT	STES	Resource person for the subject DELD	24/06/24 to 28/06/24	SIT,Lonavala

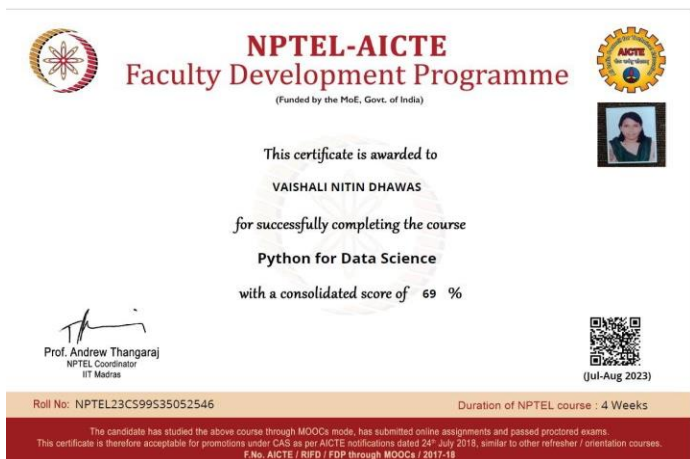


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**Department of Computer Engineering**



**NPTEL-AICTE**  
**Faculty Development Programme**  
(Funded by the MoE, Govt. of India)

This certificate is awarded to  
**VAISHALI NITIN DHAWAS**  
for successfully completing the course  
**Python for Data Science**  
with a consolidated score of **69 %**

Prof. Andrew Thangaraj  
NPTEL Coordinator  
IIT Madras

Dr. Abhay Jere  
Chief Innovation Officer  
MoE's Innovation Cell

Mr. Dipan Sahu  
Assistant Innovation Director  
MoE's Innovation Cell

Roll No: NPTEL23CS99S35052546 Duration of NPTEL course : 4 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24<sup>th</sup> July 2018, similar to other refresher / orientation courses.  
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18



This is to certify that  
**Mr. Mane shriganesh**  
of  
**Sinhgad Technical Education Society's Sinhgad Institute of Technology, Maharashtra**  
has undergone Innovation Ambassador (IA) training 'Foundation Level'  
(Total 16 Sessions of 30 contact hours) conducted in online mode by MoE's  
Innovation Cell & AICTE during the IIC calendar year

Dr. Abhay Jere  
Chief Innovation Officer  
MoE's Innovation Cell

Mr. Dipan Sahu  
Assistant Innovation Director  
MoE's Innovation Cell

02/07-2024 IIC ID: IIC1912236 F.certificate/IA/FOUNDATION/1036594



**EXCELR**  
Raising Excellence

**CHAITANYA BHARATHI**  
**INSTITUTE OF TECHNOLOGY**  
Affiliated to Savitribai Phule Pune University

**CERTIFICATE OF PARTICIPATION**  
AWARDED TO  
**Vikram Madhukar Chavan**

Participated in 30 Hours International Faculty Development Program on  
**Deep Learning for NLP and Computer Vision**  
organized by Chaitanya Bharathi Institute of Technology (CBIT) in Collaboration with Excelr.  
Date: 10th July to 28th July 2023.

Dr. Ramakrishna Kollikopu  
Professor, Department of IT  
Chaitanya Bharathi Institute of Technology (A)

Ram Tavva  
CEO Excelr Solutions

Reg/Cert No. 55028/FDP/EXLR/29072023



SINHGAD TECHNICAL EDUCATION SOCIETY'S  
**SINHGAD INSTITUTE OF TECHNOLOGY**  
ACCREDITED WITH A GRADE BY NAAC  
GAT NO. 309/310, KUSGAON (B.K.), OFF. MUMBAI- PUNE EXPRESS WAY,  
LONAVALA, TAL.- MAVAL, DIST.- PUNE, PIN- 410401

DEPARTMENT OF COMPUTER ENGINEERING  
**CERTIFICATE**

THIS IS CERTIFIED THAT DR. M. S. CHAUDHARI OF SINHGAD INSTITUTE OF TECHNOLOGY, LONAVALA HAS SUCCESSFULLY PARTICIPATED AS TRAINER/ATTENDEE IN ONE WEEK "TRAIN THE TRAINER PROGRAM" FROM 26 TO 30 DECEMBER 2023.

MS. B. L. DHOTE  
TTT CO-ORDINATOR

DR. S. D. BABAR  
HOD, CE

DR. M. S. GAIKWAD  
PRINCIPAL, SIT, LONAVALA

## 2.2 Faculty Achievements:

1. Dr. S. D. Babar was awarded the Best Paper Award for the research paper titled ;An adaptive algorithm for polysemous words in natural language processing.
2. Dr. M. S. Chaudhari serves as the Single Point of Contact (SPOC) for the NPTEL Local Chapter at SIT, Lonavala.
3. Ms. N.K. Joshi serves as the editor with the Unique Editor ID ;IIPER1681143506 for the edited book series titled Futuristic Trends in Artificial Intelligence.
4. Ms. R. S. Shishupal has achieved NPTEL certification in Data Science using Python.
5. Ms. V. N. Dhawas has achieved NPTEL certification in Data Science using Python.
6. Mr. V. S. Kadam has achieved NPTEL certification in Data Science using Python.
7. Ms. B. L. Dhote has attained NPTEL certification in the Theory of Computation.
8. Dr.S.R.Patil has completed her Ph.D in Deep Learning at the year 2023-24 from LNCT, Bhopal.
9. Dr.V.S.Kadam has Completed his Ph.D in Machine Learning at the year 2023-24 from Visveshwarya Technological



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- 10. Ms.R.N.Sathavane has Completed her Ph.D in MachineLearning at the year 2023-24 from Alwar,Rajsthan
- 11. Ms.N.K.Joshi has Registered for Ph.D of the topic An efficient Supervised Transfer Learning Model for classification at Jan 2022 from Mangalayatan university
- 12. 5+ Faculty registered for NPTEL program at every year and completed his/her course with Successfully, Elite and Elite gold Remark

### 2.3 Interaction with outside world

#### (Guest Lecture/Reviewer/Session Chair/Syllabus design/paper setter)

Sr. No	Name of Faculty	Name of Subject	Exam Duty	Date
1	V.N.Dhawas	OOMD	Insem/Endsem paper setter	Sept 2023/Nov 2024
2	V.N.Dhawas	SMA	Endsem paper setter	Nov 2024
3	V.N.Dhawas	Robotics	Insem/Endsem paper setter	Sept 2023/Nov 2024
4	B.L.Dhote	DSA	Endsem paper setter	Dec 2024
5	S B Nimbekar	ADSP	Endsem paper setter	27/10/2024
6	S B Nimbekar	DSP	Insem/Endsem paper setter	26/10/2024
7	S B Nimbekar	IOTES	Insem/Endsem paper setter	3/11/2024
8	S.R.Patil	TOC	Insem/Endsem paper setter	7/11/2024
9	Dr.S.D.Babar	Subject Expert	PhD presentation at AISSMSCOE,Pune	13/09/2024
10	Dr. S. D. Babar	PhD RPS	PhD exam at D.Y.Patil University,Ambi	21/07/2024
11	Dr. S. D. Babar	PhD	PhD Viva at Sandip university	09/08/2024
12	Dr.S.D.Babar	As a Reviewer	International Conference on Computational Intelligence andNetwork Systems (CINS 2023)Dubai, UAE	18/10/2024 to 20/10/2024
13	Dr.S.D.Babar	External Examiner	PhD viva at SKNCOE,Pune	19/07/2024
14	Dr.S.D.Babar	Subject Expert	Expert in Infromation Technologyat Zeal Institutes	13/09/2024
15	Dr.S.D.Babar	Staff selection	Staff selection Committee meetingat Samarth Group of Institutes COE,Pune	25/07/2024
16	Dr.S.D.Babar	Staff selection	Subject Expert at VIIT,Pune	24/07/2024
17	Dr.S.D.Babar	Subject Expert	Subject Expert at VIT,Pune	1/07/2024



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## Department of Computer Engineering



### AISSMS COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi, Recognized by Govt of Maharashtra,  
Affiliated to Savitribai Phule Pune University and recognized under 2(f) and 12 (B) by UGC  
(Id.No.PUP/NEEng/093 (1992), AISHE Code No. C-41227  
Accredited by NAAC with A+ Grade



SHRI MALOJIRAJE CHHATRAPATI  
Honorary Secretary

Dr. D. S. BORMANE  
Principal

Ref. No: AISSMSCOE/PR/14/152/2023-24

Date: 11-09-2023

To,

Dr Sachin Babar  
Professor and Head , Computer Engineering  
Sinhgad Institute of Technology, Lonavala

Dear Sir,

With reference to the letter received from Savitribai Phule Pune University Ref. No.:PGS/3404 Dated:4/08/2023 regarding list of selected PhD students for PhD admissions at AISSMS COE research centre, PhD students' research topic/Title finalization presentations are scheduled at AISSMS College of Engineering, research centre, Pune on 13<sup>th</sup> Sept 2023.

As you have been associated with the field of Computer Engineering for a long time and made immense contributions in various research areas of Computer Engineering, you are invited as **Subject Expert** for PhD presentation for finalization of research topic/title of PhD students.

The schedule of Presentation is as follows,  
**Day and Date-** Wednesday, 13<sup>th</sup> Sept 2023 **Time:**9.00 am onwards.  
**Venue-**Department of Computer Engineering, AISSMS College of Engineering, Pune.  
You are requested to convey your presence for the same.

Thanking you,  
Dr. D. S. Bormane  
Principal and Research Centre Head,  
AISSMSCOE Pune



### Savitribai Phule Pune University Formerly University Of Pune

Phone :020-25621440/25621447  
Fax : 020-25621441  
Email :  
ar.coordination@pun.unipune.ac.in  
in  
Web : <http://www.unipune.ac.in>



CO-ORDINATION SECTION  
Ganeshkhind, Pune - 411 007  
Maharashtra (INDIA)

Second half of the year,2023



05/11/2023 09:00

Dhawas Vaishali Nitin

Sinhgad Technical Education Society Sinhgad Institute of Technology Addr: Survey No 309/310 Kusgaon Bk  
Lonavala Ta: Mawal Dist: Pune  
Mobile No. : 8888190226 Email : vnd.sti@sinhgad.edu

Sir/ Madam,

1. The University Authorities have been pleased to appoint you for the Paper Setter and Examiner, in the subject of -

Post Name	Examination	Paper / Subject	Chairman	Important Dates
Paper Setter & Examiner	TE 2019 (EndSem) (Theory)	Paper-Robotics (Elective - I) (Theory) ( Sem-I ) (316845 (A)) (2019 Pattern)	Jagtap Nalini Santosh Dr.D.Y.Patil Prashanthan Dr. D.Y.Patil Institute of Engineering, Management and Research Addr: Sector no 29 PCNTDA Rayet Nigdi Panshikaran Akurdi Pune 44 Ta: Pimpri Chinchwad (corporation Area) Dist: Pune 9881716186	P.S. Meetings 05.11.23 To 07.11.23-
Appl NO. 23243312	BOS:Artificial Intelligence and Machine Learning			

2. This appointment is based on certain assumptions and subject to respective provisions of Maharashtra Public Universities Act, 2016 and Statutes/ Ordinances, Rule and Regulations framed thereunder.

- It shall be obligatory on every teacher and on the non-teaching employee of the University, affiliated, conducted colleges, community colleges or recognized institution to render necessary assistance and service in respect of examination of the university and evaluation of students as prescribed by statutes. If any teacher or non-teaching employee fails to comply with the order of the university or colleges or institution, in this respect, it shall be treated as misconduct and the employee shall be liable for disciplinary action in case of failure on the part of the teacher or non-teaching employee of any affiliated college, conducted college, community college or recognized institution, to comply with the order of the university in this respect, the vice-chancellor shall have power to take an appropriate action against them, which may include imposing penalties including suspension of approval to the appointment of a teacher, as may be prescribed by Statutes.
- Please put yourself in communication with your Chairman immediately in regard to the meeting of the paper setting.
- If required, you will be called by the Director, Central Assessment Programme for Central Assessment.
- Please intimate the Director/Board of Examination and Evaluation, Savitribai Phule Pune University, Ganeshkhind, Pune 411 007, in case you are holding the other appointments of this University, if any.
- Any change in the address, phone no., email address etc may please be communicated to both, the Chairman and the Co-ordination Section, Examination Branch, Savitribai Phule Pune University, Ganeshkhind, Pune-7.
- The TADA will be paid only to those paper-setters who will attend the meeting of the paper-setters on the invitation from the concerned chairman. Travel by car for attending meeting is not allowed.
- Please read and adhere to the enclosed important instructions.
- The chairman should produce his order while submitting question papers to strong room section.

INTERNATIONAL CONFERENCE ON COMPUTATIONAL INTELLIGENCE AND NETWORK SYSTEMS (CINS 2023)  
DUBAI, UAE, OCTOBER 18-20, 2023

## CERTIFICATE OF REVIEWING

Awarded to

# Dr. Sachin Babar

In recognition of the review for three (3) papers contributed to the International Conference on Computational Intelligence and Network Systems (CINS 2023) on October 18-20, 2023, organized by Birla Institute of Technology and Science (BITS) Pilani, Dubai Campus, Dubai UAE. We thank you for your voluntary participation in the peer review process and hope that we may call upon you again to review future series of the conference.

B. Vijayakumar  
Program Chair  
CINS 2023

SINHGAD TECHNICAL EDUCATION SOCIETY'S,  
**SMT. KASHIBAI NAVALE COLLEGE OF ENGINEERING,**  
Approved by AICTE Vide F. No. 740-89-004 (NDEGAP/ET/2000) &  
Affiliated to Savitribai Phule Pune University ID. No. PUP/NE/ENG/155/2001  
Accredited by NBA & NAAC With "A" Grade  
Recognized by UGC under Section 2 (f) & 12 (B) of UGC Act 1956

S. No. 441, Vadgaon (Buthik), Off. Sinhgad Road, Pune - 411041.  
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<b>PROF. M. N. NAVALE</b> B.A., M.P.M., Ph.D. FOUNDER PRESIDENT	<b>DR. (MRS.) SUNANDA M. NAVALE</b> B.A., M.P.M., Ph.D. FOUNDER SECRETARY	<b>DR. A. V. DESHPANDE</b> B.E., M.E. (Computer Engg.), Ph.D. PRINCIPAL
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Date: - 19/07/2023

To,  
**Dr. Sachin Babar**  
Professor,  
S.I.T, Lonavala.

**Subject:** Invitation as an External Examiner in Assessment Committee for Progress Presentation of Ph.D. Research Scholar.

Respected Sir,  
Progress Presentation of Ph.D. (Computer Engineering) Research Scholars registered at SKNCOE, Pune Research Center is scheduled on 3<sup>rd</sup> Aug, 2023 at 9.30 am. You are invited as an External Examiner in Assessment Committee for Progress Presentation.

I request you to please accept the invitation.  
Thanking You,

**Dr. A.V. Deshpande**  
Head Research Center & Principal,  
SKNCOE, Pune

Pune-41.



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## 2.4 Research Publications of Faculty (Paper/Book Chapter)

Sr.No	Name of Faculty	Title of Paper/Book Chapter	Journal name	State/National/International	ISSN/ISBN number	Year
1	Dr. Babar sachin Dilip	Analysis of Dynamic Knowledge Graph Construction and Clustering for Effective Knowledge Management in Machine-to-Machine Communication	Advances in Nonlinear Variational Inequalities	<b>International</b>	1092-910x	2024
2	Dr. Babar sachin Dilip	Enhancing IoT Device Classification with Hybrid Stacked Ensembles of Machine Learning Classifiers	International Journal of Intelligent Systems and Applications in Engineering	<b>International</b>	2147-6799	2024
3	Dr.Surnana Amruta Vijay	Application of Artificial Intelligence and Machine Learning in Manufacturing Industry: A Bibliometric Study	International Journal of Intelligent Systems and Applications in Engineering	<b>International</b>	2147-6799	2024
4	Dr.Surnana Amruta Vijay	Fruit Disease Detection and Classification using Machine Learning and Deep Learning Techniques	International Journal of Intelligent Systems and Applications in Engineering	<b>International</b>	2147-6799	2024



**Word Sense Disambiguation: Adaptive Word Embedding with Adaptive-Lexical Resource**



**Chandrakant D. Kokane, Sachin D. Babar, Parikshit N. Mahalle, and Shivprasad P. Patil**

**Abstract** Word sense disambiguation (WSD) is a subdomain of natural language processing (NLP). WSD mainly deals with identifying the correct sense of ambiguous words. The discussed disambiguation model is tested for homonymous and polysemous words, and the same is tested with SemCor, OMSTI, and the newly generated Adaptive-Lex dataset. The Adaptive-Lex dataset is generated by considering the scope of SemCor and OMSTI. The discussed dataset is constructed by considering the dynamic features of ambiguous words. The main objective of this dataset is to represent ambiguous words with dynamic features. While dealing with ambiguous words, disambiguation is expected by considering available context information. The word vectors are constructed dynamically, and the dataset is also created by considering the countable features of ambiguous words. If the word vector is prepared concerning context information, it generates more fine results for WSD.

**Keywords** Lexical ambiguity · Adaptive word embedding · Adaptive-Lex

C. D. Kokane (✉)  
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e-mail: [cdkokane1992@gmail.com](mailto:cdkokane1992@gmail.com)

S. D. Babar  
Department of Computer Engineering, Sinhgad Institute of Technology, Lonavala, Maharashtra, India

P. N. Mahalle  
Department of Artificial Intelligence and Data Science, Vishwakarma Institute of Information Technology, Pune, Maharashtra, India

S. P. Patil  
NBN Sinhgad School of Engineering, Pune, Maharashtra, India  
e-mail: [nbnssoe@sinhgad.edu](mailto:nbnssoe@sinhgad.edu)

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N. Chaki et al. (eds.), *Proceedings of International Conference on Data Analytics and Insights, ICDAI 2023, Lecture Notes in Networks and Systems 727*,  
[https://doi.org/10.1007/978-981-99-3878-0\\_36](https://doi.org/10.1007/978-981-99-3878-0_36)

Chapter 8  
**AI for IoT Application:  
An Systematic Review**

Ganesh Shivaji Pise  
*Pune Institute of Computer Technology, India*

Sachin D. Babar  
*Sinhgad Institute of Technology, Lonavala, India*

**ABSTRACT**

*The popularity of the Internet of Things (IoT) has increased due to the development of faster internet networks and more advanced digital devices (Smarter Hardware), such as sensors integrated into a microcontroller. Currently, sensors and other digital devices used in diverse geographical sectors, such as agriculture, hospitals, smart homes, and smart cities, generate and share vast quantities of data. These IoT data must be collected and mined using AI for knowledge management (AI). Collaboration between AI and IoT results in intelligence system automation. This continuum will influence all emerging industries, including healthcare, transportation, manufacturing, and retail. IoT devices generate vast quantities of data, and AI will aid in more intelligent data planning for various IoT applications. In the software engineering and technical research processes, AI techniques are utilized for automatic problem solving and problem identification.*

**INTRODUCTION**

Artificial intelligence (AI) and the IoTs are tying physical items and devices together because they encourage physical objects and devices to see, hear, and think. Through the exchange of information, physical objects/devices are able to "speak" to one another and convey their decisions to one another. Products that were previously unintelligent are becoming intelligent thanks to technologies such as the IoTs, which connect previously unintelligent objects to the internet by using a variety of embedded devices, communication protocols, sensor networks, internet protocols, and applications to connect them to the internet (Alam et al., 2018). Before learning about AI, you must have the basic knowledge of computer programming language such as C, C++, Java, Python, etc. along with this knowledge of essential

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**2.5 Faculty Pursuing PhD:**

Sr. No.	Name of the Faculty	Topic	University	Year of Ph.D. Registration	Supervisor's Name
2	Mr. S. B. Nimbekar	An Intelligent system for agriculture	Visveshwarya Technological University	Feb 2016	Dr.G.U.Kharat

**3. Students Achievements**

1. The team of students from the Computer Engineering department at SIT excelled by winning the Outstanding Contributor Award at the Cognizant Technoverse Hackathon.
2. Soham Patil, a third-year computer engineering student, has been chosen to be part of the National Service Scheme team responsible for organizing the state-level Republic Day parade.
3. Mr. Aum Javalgikar from the Computer Engineering department has been selected by DOTAgent Technologies Pvt Ltd. as a Software Development Engineer (AI) with a package of 10 Lakh per annum along with an Employee Stock Ownership Plan (ESOP) grant valued at 10 Lakh.
4. Pranay Prakash Sahare has successfully completed a 7-day bootcamp with devTown focused on Python and Computer Vision.



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## Department of Computer Engineering

5. Atharv Kulkarni achieved an AIR of 664 in the Coding World Cup event Powered by Logitech.
6. Tanvi Shetty has been chosen as a Microsoft Student Ambassador.
7. Mr. Shubham Patil has an Intellectual Property Rights (IPR) related to a sustainable agriculture protection system designed to mitigate damage from heavy rain, hail storms, and high temperatures.
8. Aniket Sandbhor has obtained certification in cloud computing from NPTEL.
9. Akshay Pawar has achieved NPTEL certification in Database Management System.
10. Ankur Singh has earned an NPTEL certification in Programming in Java.
11. 100+ students registered for NPTEL program at every year and completed his/her course with Successfully, Elite and Elite gold Remark
12. Sushant Vishwas Gaikwad has completed certification in Ethical AI Certifying Authority by Infosys Springboard With the Rank A+.
13. Ishita Sanjay Khedekar has achieved Certification in Web development and DSA in C++ Certifying Authority by Udemy with the rank A.
14. 40+ students has Successfully completed foreign Language Course at the year 2023-24
15. 14+ students selected for Japanese Language (N5 Level ) conducted by Accenture Company at the year 2023-24
16. 10+ students has Successfully completed foreign Language Course at the year 2024-25.
17. 25 students selected for Japanese Language (N5 Level ) conducted by Accenture Company at the year 2024-25

## 4. Activities/Expert Talk Organized in the Computer Engineering Department

<b>4.1 Title of Activity</b>	<b>:-</b>	<b>Spiritual Seminar on Bhagwat Gita</b>
<b>Day &amp; Date</b>	<b>:-</b>	Wednesday (25th September 2024)
<b>Objectives</b>	<b>:-</b>	1 Understanding the Relevance of the Bhagavad Gita in Modern Life. 2. Fostering Inner Peace and Emotional Resilience. 3. Encouraging Ethical and Moral Development
<b>Target Audience</b>	<b>:-</b>	Students and Staff
<b>Short Summary of the Event</b>	<b>:-</b>	The ACM club organized an event focusing on Bhagwat Gita. The spiritual talk on the <b>Bhagavad Gita</b> for college students aimed to bridge ancient wisdom with modern challenges. It focused on how the teachings of the Gita can be applied to the lives of young individuals navigating the pressures of academics, relationships, and career choices..
<b>Student Coordinators</b>	<b>:-</b>	1. Dipak Panchal 2. Vedant Nigote 3. Anuj Deore

**Faculty Coordinators** :- Prof .Shreyas S. Shinde

**Resource Person Details** :- Name : Amol Kokane  
Spiritual Speaker  
Adhyatmik Vishwa Vidyalaya

**Glimpses :**



**4.2 Title of Activity** :- **Mental Health Awareness Event**

**Day & Date** :- Wednesday (31/07/2024)

**Objectives** :-  
1. To educate students on the importance of mental health.  
2. To introduce various healing techniques and their benefits.

**Target Audience** :- Students and Staff

**Short Summary of the Event** :- The ACM club organized an event focusing on mental health awareness. The event covered various topics, including meditation, energy healing, benefits of energy healing for students, the concept of a healing lab space, pranic healing, and practical healing sessions. Participants shared their experiences with healing, making the event interactive and informative.

**Student Coordinators** :-  
1. Dipak Panchal  
2. Vedant Nigote  
3. Anuj Deore

**Faculty Coordinators** :- Prof .Shreyas S. Shinde

**Resource Person Details** :- Name :Nastaran Shirvani  
 Associate certified pranic healer  
 7+ years of experience as a professional healer  
 Computer science graduate  
 Post graduation in project management

Name: Akshay Dethé  
 Pranic healer  
 Designation: COO. ( CharityERP Software)

**Brocher :**

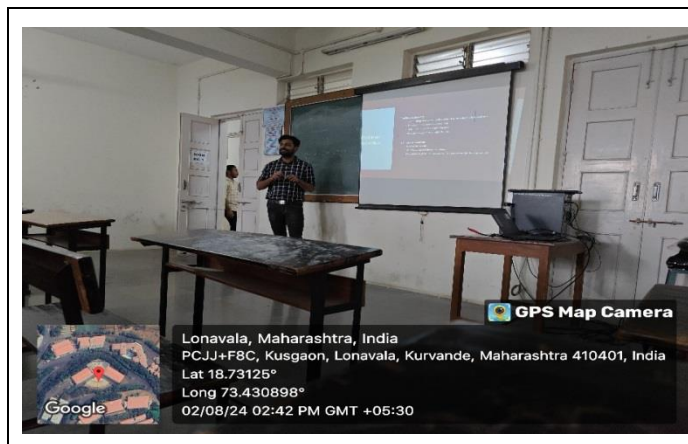


**Glimpses :**



<b>4.3 Title of Activity</b>	:- <b>Innovation And Patent Mining Workshop</b>
<b>Day &amp; Date</b>	:- Friday (02/08/2024)
<b>Objectives</b>	:- 1. Patent Fundamentals: Provide a clear understanding of patents, including the types, benefits, and legal implications of securing patents for inventions and innovations. 2. Research and Development Skills: Enhance participants' research and development skills, focusing on identifying novel ideas and translating them into patentable innovations.
<b>Target Audience</b>	:- Students
<b>Short Summary of the Event</b>	:- The ACM club organized an event The Innovation and Patent Mining Workshop aims to equip participants with a comprehensive understanding of innovation processes and patent fundamentals. The workshop will enhance research and development skills, teach effective patent search techniques, and guide participants through drafting high-quality patent applications. It will also raise awareness of intellectual property rights and explore commercialization strategies for patented innovations. Through case studies, hands-on experience, and interactive sessions with industry experts, participants will gain practical insights and skills in innovation and patent mining. The workshop will promote collaborative innovation and address the legal and ethical considerations in the field.
<b>Student Coordinators</b>	:- 1. Dipak Panchal 2. Vedant Nigote 3. Anuj Deore
<b>Faculty Coordinators</b>	:- Prof .S. S. Shinde
<b>Resource Person Details</b>	:- Dr. Kushal Patel IBM Master Inventor and Advisory software engineer

**Glimpses :-**





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### 4.4 Title: Train the Trainer

**Day:** Monday to Friday

**Date:** 24/06/2024 to 28/06/2024

**Venue:** Inauguration at IT Seminar Hall of Sinhgad Institutes, Lonavala

**Time:** 9.00 AM TO 10.00 AM

**Staff Co-coordinator:** Ms. B. L. Dhote

**Activity Type:** Train The Trainer

**Target Group:** Faculty of Department of Computer Engineering, SIT, Lonavala and SKNSITS, Lonavala

**Program Objectives :** The Train the Trainer (TTT) program was conducted for SE, TE, BE faculties with the objective of enhancing the instructional abilities and professional development of trainers within our organization. The program aimed to equip trainers with the necessary skills, knowledge, and techniques to effectively deliver training sessions, ensuring consistency, quality, and improved learning outcomes.

**Glimpses:**

SINHGAD TECHNICAL EDUCATION SOCIETY'S  
SINHGAD INSTITUTE OF TECHNOLOGY,  
LONAVALA  
One Week Collaborative Programme  
**Train The Trainers**  
2024-25 (Sem - I)  
SE, TE & BE  
24 - 28 June 2024



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**Department of Computer Engineering**





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Department of Computer Engineering

## 5. Activities Conducted under different Clubs/Chapter of Computer Engineering Department (ACM/ACES/Cultural/MCC/Business Club/Literary/Career Counselling/Training and placement)

### 5.1 Title: Department Level Teachers Day & Engineers day Celebration

“Department Level Teachers Day & Engineers Day Celebration” was organized by Computer Engineering Department on 15 Sept. 2024, Friday from 03:00 pm to 5:00 pm. The event was organized at F-122 CE Dept. Seminar Hall. The total no of students who attended this event were more than 64, along with faculty and students Coordinators.

**Venue:** - (F-122) Comp Engg Dept.

**Date:** - 15/09/24

**Place:** - Lonavala

S N	Time	Activity Details
1	15th Sep 2024 <03.00 pm to 03.10 pm>	Welcome at the department[Registration] Faculty Coordinator:- Prof. S. B. Nimbekar ACES President : Shubham Patil Welcome by Faculty Coordinator and ACES President, Registration in the department, Arrival of the guest, Sarasvati Pooja and Inauguration by the guest.Program Anchor;- Shruti Sonavane, Krishna Jadhav,Adishree Salunke ACES team member.
2	15th Sep 2024 <03.10 pm to 03.15 pm>	Address by COMP H.O.D:- Dr. S. D. Babar will brief about the details about the Teachers Day & Engineers Day celebration history.
3	15th Sep 2024 <03.15 pm to 03.30 pm>	Appreciation of Prof N K Patil for completion of first year LLB by securing rank 3 in University and rank 1 from Govt College of LLB. Felicitation of Guest by Dr M S Chaudhary.
4	15th Sep 2024 <03.30 pm to 03.45 pm>	Momento distribution , a token of Love for Teachers from students.
5	15th Sep 2024 <03.45 pm to 04.00 pm>	Appreciation of Teachers whose subject result were good for academic year 2022-23
6	15th Sep 2024 <04.00 pm to 04.15 pm>	Appreciation of Students whose subject result were good for academic year 2022-23
7	15th Sep 2024 <04.15 pm to 04.30 pm>	Entertainment Program for Students & staff. Drama
8	15th Sep 2024 <04.30 pm to 04.45 pm>	Entertainment Program for Students & staff. Dance
9	15th Sep 2024 <04.45 pm to 04.55 pm>	Refreshment



10	15th Sep 2024 <04.55 pm to 05.00 pm>	Vote of Thanks by Secretary: Mahesh Kadam
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**Glompes :**



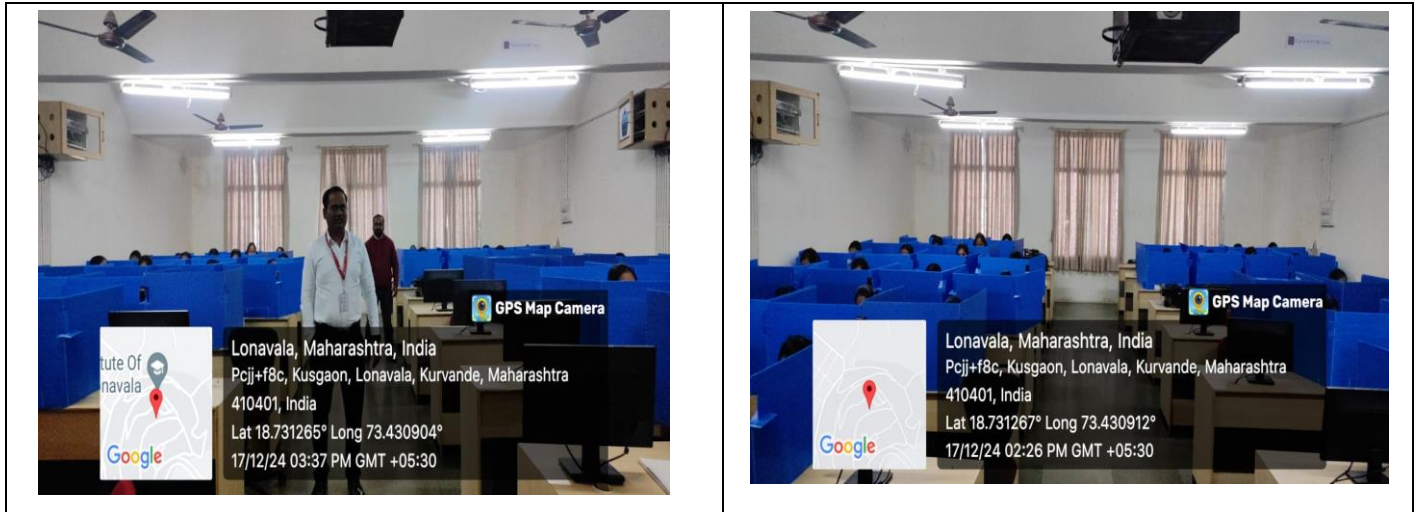
**5.2 Activities organized under Training and Placement**

- 5.4.1. Title of Activity:** HSBC Drive Assessment
- Day & Date:** 17th December 2024
- Objectives:** The objective of the HSBC Drive Assessment was to familiarize BE girls students at SIT Lonavala with the functionalities and practical applications of the HSBC platform. This event aimed to enhance their understanding of HR technology and data management, equipping them with essential skills for their future careers.
- Target Audience:** BE Girls Students

**Short Summary of the Event:**

The HSBC Drive Assessment was a placement test for BE girls students at SIT Lonavala, aimed at evaluating their suitability for roles at HSBC. Participants demonstrated their knowledge of HR technology and data management through a series of assessments. This event provided students with a valuable opportunity to showcase their skills and secure potential job placements.

**Glimpses :**



**5.3 Title of Activity :** DarwinBox Drive Assessment

**Day & Date :** 25th Sept 2025

**Objectives :** The objective of the DarwinBox Drive Assessment was to familiarize BE students at SIT Lonavala with the functionalities and practical applications of the DarwinBox platform. This event aimed to enhance their understanding of HR technology and data management, equipping them with essential skills for their future careers.

**Target Audience :** BE Students

**Short Summary of the Event :**

The DarwinBox Drive Assessment was a placement test for BE students at SIT Lonavala, aimed at evaluating their suitability for roles at DarwinBox. Participants demonstrated their knowledge of HR technology and data management through a series of assessments. This event provided students with a valuable opportunity to showcase their skills and secure potential job placements.

**Glimpses :**



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## Placed Student List

PLACEMENT RECORD 2024-25 BATCH					
Sr. No.	Student Name	Branch	College Name	Company Name	Package
1	Harsh Gaikwad	CS	SIT	Worldline	7.0 LPA
2	Meher Zakir Mulani	CS	SIT	Noovosoft Technologies LLP	7 LPA
3	Rupesh Subhash Chavan	CS	SIT	Infosys	9.5 LPA
4	MUSKAN TIWARI	CS	SIT	NICE Systems	5.75 LPA
5	Ujwal Meghraj Ghodeswar	CS	SIT	Accenture	4.5 LPA
6	Mukund Shivdas Dhumal	CS	SIT	Accenture	4.5 LPA
7	Ashitosh Santosh Warghade	CS	SIT	Accenture	4.5 LPA
8	Shreya Satyawar Kolhe	CS	SIT	Accenture	4.5 LPA
9	Sejal Anil Mehta	CS	SIT	Accenture	4.5 LPA
10	Ujwal Ghodeswar	CS	SIT	Infosys	3.6 LPA
11	Abhijeet Anant Phute	CS	SIT	Cognizant	4.0 LPA
12	Bhushan Dasharath Tathe	CS	SIT	Cognizant	4.0 LPA
13	Mahesh Shivaji Kadam	CS	SIT	Cognizant	4.0 LPA
14	Mohd Zayed Mohd Salim Ansari	CS	SIT	Cognizant	4.0 LPA
15	SAKSHI SUBHASH GHOLAP	CS	SIT	Cognizant	4.0 LPA
16	Sheetal Dattatraya Surwase	CS	SIT	Cognizant	4.0 LPA
17	Shiftain Alam	CS	SIT	Cognizant	4.0 LPA
18	Harshal Devidas Patil	CS	SIT	Infosys	3.6 LPA
19	Kirti Chandrakant Malusare	CS	SIT	Infosys	3.6 LPA
20	Rajlakshmi Kamlesh Kashyap	CS	SIT	Infosys	3.6 LPA
21	Sanchit	CS	SIT	Infosys	3.6 LPA
22	Shivam Balasaheb Bhagat	CS	SIT	Infosys	3.6 LPA
23	Soham Vinod Nagane	CS	SIT	Infosys	3.6 LPA
24	Sujal Sandesh Patil	CS	SIT	Infosys	3.6 LPA
25	Mohit Sunil Patil	CS	SIT	Infosys	3.6 LPA
26	Sanket Devidas Mulmule	CS	SIT	Infosys	3.6 LPA