



Sairam A

Affiliated to Visvesvaraya Technological University, Belagavi Accredited by NAAC ISO 9001:2015 Certified Institution

# **Department of Computer Science & Engineering**

2022-2023 SAI ADVAYA Volume 1 Issue 1

#### **About SSCE**

Sri Sairam College of engineering formerly Shirdi Sai Engineering College, Bengaluru, established in the year 1997 by MJF.Ln .Leomuthu, Founder Chairman of Sapthagiri Educational Trust, is a non-profitable and non-minority institution. Located within the Bengaluru city limits, Sairam College is an inspirational place to study in which everything from classroom to laboratories, hostel to cafeteria is modernised with state-of-the art infrastructure. The labs and other facilities are among the best in the region making it one of the most sought-after institutions by parents and student.

The Ultra-modern computer labs with latest software and hardware, and techno-visionary innovative centre make the institution learning heaven for enthusiastic young engineering aspirants. ICT enabled class rooms and work areas are well furnished and equipped with modern up-to-date facilities.



Dr. B Shadakshrappa Principal, SSCE

#### **Institution Vision**

To emerge as a "center for excellence" offering technical education and research opportunities of very high standards to students, develop the total personality of the individual and still high levels of discipline and strive to set global standards, making our students technologically superior and ethically

#### Mission of the Institute

We Dedicate and commit ourselves to achieve, sustain and foster unmatched excellence in Technical Education. To this end, we will pursue continuous development of infrastructure and enhance state-of-the-art equipment to provide our students a technological up-to-date and intellectual inspiring environment of learning, creativity, innovation and professional activity and inculcate in them ethical and moral values.

#### **About Department**

The Department of Computer Science and Engineering in Sri Sairam College of Engineering formerly Shirdi Sai Engineering College was established in the year 1997 1998 (with intake of 40 students).



The department offers B.E. degree programmes in Computer Science and Engineering which are affiliated to Visvesvaraya Technological University.

The Department has an excellent track record of organizing various workshops and conferences in areas of emerging technologies and faculties are encouraging students to do innovative projects.

The faculty members are highly motivated and devoted to deliver the highest quality professional education to students and combined with strong teaching learning process including ICT enabled classrooms. The placement record of the department had always been impressive.

#### **Department vision**

Transform students into professional, ethical engineers to meet global challenges through quality education.

#### **Department Mission**

- To impart quality education in Computer Science and Engineering with the strong industry institute partnership to develop technical & amp; research Skills.
- Enrich the technical ability of students to face the world with confidence, commitment and team-work in the IT field.
- Provide a learning platform for interdisciplinary innovation, research and Self-learning.
- Encourage faculty and students to actively participate in holistic educational practices and to impart social values

#### **Department Highlights**

The department has 120 intakes, considering all the technical quality and facilities providing by the management. The department is strengthened with 26 faculties out of which are 5 doctorates and 8 are pursuing Ph.D and 7 are supporting staff.

# **Program Educational Objectives (PEOs)**

PEO 1	Graduates develop knowledge in the core areas of Computer Science Engineering and enhance technical and research skills for providing software solutions
PEO 2	Graduates will pursue technical and managerial skills to analyze and develop problem solving abilities of Computer Science and Engineering through Mathematics, Science and Engineering to encounter industrial needs.
PEO 3	Graduates develop effective communication and management skills to interact effectively with stakeholders in the field of Computer Science Engineering and develop innovative solutions for real time problems.
PEO 4	Graduates with Lifelong learning demonstrate skills and knowledge in the domain of computer programming and exhibit leadership qualities, team work, social and ethical values.

**Program Specific Outcomes (PSOs):** 

	The shilter to understand analyse and develop computer angement in the areas
	The ability to understand, analyze and develop computer programs in the areas
PSO-1	related to algorithms, system software, networking and embedded computing, web
	design, and data analytics for efficient design of computer-based systems.
	The ability to understand the evolutionary changes in computing technologies,
PSO-2	apply standard practices and strategies in software project development and testing
P30-2	using various programming environments to deliver a quality product for business,
	real world problems and meet the challenges of the future.

PROGRAM OUTCOMES (POs)

P01	<b>Engineering knowledge</b> : Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
P02	<b>Problem analysis</b> : Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
P03	<b>Design/development of solutions</b> : Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
P04	<b>Conduct investigations of complex problems</b> : Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions
P05	<b>Modern tool usage</b> : Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
P06	<b>The engineer and society</b> : Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
P07	Environment and sustainability: Understand the impact of the professional engineering

	solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
P08	<b>Ethics</b> : Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
P09	<b>Individual and team work</b> : Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
P010	<b>Communication</b> : Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
P011	<b>Project management and finance</b> : Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
P012	<b>Life-long learning</b> : Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

#### **Department Activity**

#### **Students Achievement**

Mahima Sahu[1SB20CS063] has completed of internship at BITES under the guidance Dr.Selvan D, Co-chairman, BITES from 1/3/2023 to 31/5/2023.



❖ Pratyush Priyadarshini [1SB20CS0081], Adhya J J[1SB20CS005], Arvind Sundaram[1SB20CS006], Bhavani Shankar Mohanthy[1SB20CS019], Chaithya M[1SB20CS066] A J Daya Sagar [1SB20CS001], Harish Kumar V[1SB20CS036], Harsha J [1SB20CS043], Kavya M N[1SB20CS051], Mahesh Kumar[1SB20CS062] has completed Intel Unnati Industraial Training-Summer 2023 on "Smart Mobile Phone Price Prediction" under the guidance of Dr. Swagata Sarkar from May 29 to July 15, 2023.



Rinku [1SB19CS081], Shivam Sharma [1SB19CS103], Uday Kumar Reddy[1SB19CS053], Shreya Keshri [1SB19CS106], CSE participated in Project Expo "Aruna – autonomous underwater vehicle for cage fishing " for securing (special mention prize) for the project in recognition of exceptional performance and outstanding

achievement in matrix forum university contest on 7<sup>th</sup> June 2023.



Shivam Sharma [1SB19CS103], Uday Kumar Reddy[1SB19CS053],, has participated a project competition SAUVC organized by Singapore polytechnic College and demonstrated a project titled on "Autonomous Underwater vehicle" and won 6th prize on 28th September 2022





Bammidi Pragati Rao has received best pega system programmer from Pega Systems in the year 2022.



Bammidi Pragati Rao has certified Pega Senior system Architect from Pega Systems in the year Febuary 23, 2022.



- Syed Yaseen [1SB21CS112], 2nd Year CSE student got second prize worth of 1000 rupees in Dream Spark 2023
- Chandana A [1SB18CS001], 8<sup>th</sup> sem student has participate in AMUROVC 2.0 National Level Underwater Remotely Operated Vehicle Challenge By MTS-AUV project exhibition and demonstrated her project titled on Autonomous Underwater Vehicle Challenge on 26<sup>th</sup> September 2022
- ❖ Neelaveni R[1SB20CS071], Yashaswini S[1SB20CS121] has participated in National level Project Exhibition on title ""Lake Cleaning Robot" organized by City engineering college, Bangalore on 20th Jun 2022 and won 1st Prize with a cash award of Rs.7500.



#### **Sports Awards**

Chethan M has participated in Archery 30m a VTU inter zone competition at RVCE Bangalore and won 2nd prize in the academic year 2022-2023 Keerthana S has participated in Archery 50m a VTU inter zone competition at RVCE Bangalore and won 2nd prize in the academic year 2022-2023



#### Workshop/Webinar

Departments of Computer Science & Engineering has organized 3 days workshop on "Data Analytics using r programming" with an eminent resource person Mrs.Senbagavalli S, Asst.prof of alliance college of engineering Bangalore.



Department of Computer Science and Engineering of SSCE organize a Seminar on "Recent trends in BigData and Machine Learning" on 22.12.2022



### Conference

Dept. of CSE has organized two days "International conference of "Recent trends in computing and communication technologies (ICRCCT)" on 23<sup>rd</sup> and 24<sup>th</sup> of June 2023



#### **Guest Lecturer**

Dept. of CSE has organized two days "International conference of "Business of AI Era (ICRCCT)" on 23<sup>rd</sup> and 24<sup>th</sup> of June 2023.



#### **FDP**

1. Mrs. Mala B A and Mrs. Jenifer A attended one week FDP on "Cyber security" under Microsoft Cybershikshaa for Educators Program held from 24 Aug 2022 to 02 Sep 2022 and trained final year students on oct 2022 for 41 students in the satge1 at Sri Sairam College of Engineering Anekal.



#### **Parents Meeting**

CSE Department has conducted parents council meeting on 04/06/23. Around 64 parents from all semesters attended the meeting. Parents were happy with digital mode of teaching and appreciate overall progress of the department.



#### **ONAM** celebration

CSE department has celebrated Onam on 31.09.2023 in the department by worshipping god Vishnu by HOD faculty members and students



#### **International Yoga Day:**

Department has organized International Yoga Day for on 21 July 2023 for all the students.



### Rangoli Competition:

Dept of CSE had conducted cultural activities- Rangoli competition on 17.03.2023 by Faculty and students.



## Ayuda Pooja

Ayudha pooja has celebrated in the department by worshipping goddess Saraswathi by HOD, faculty members and students.



#### **NPTEL courses:**

- 1. Bammidi Pragati Rao has completed Data Analytics with Python through NPTEL online certification course
- 2. Sumanth J Samuel has completed Data Analytics with Python through NPTEL online certification course
- 3. Jenifer A has completed Data Analytics with Python through NPTEL online certification course
- 4. Jenifer A has completed Privacy and Security in online social media through NPTEL online certification course.

#### **Online Courses:**

1. All the faculties and many students completed the Infosys online springboard course completion certificates in various courses.



# **Staff Publications:**

The department of CSE faculties have done 75 publications in various indexing in 2022-2023 academic Year.

S.N	Title of	Name of the	Name of	Year of	ISSN/ISBN	Volume	Doi	indexir	g Link
0	paper	author/s	journal	publicati or	number	/Issue	numt	per	
1	Optimised routing on wireless body sensor network using adaptive lion optimization algorithm using IOT	Dr.Smitha I A	SSRG International Journal of Electrical and Electronics Engineer ing	2022-23	2348- 8379	Vol.12 No.4, pp.340 363	10.15 /I ISCC.: 21. 1185	indexed	https://w ww.ind erscience.c om/in fo/inarticle. php? artid=1185
2	Hybrid TABU search with SDS based feature selection for lung cancer	Dr.Smitha I A	Elsevier	2022-23	2666- 6030	Volume 3, 2022, Pages 143-149	/j. ijin.20 2.0 9.002	indexed	https://w ww.sci encedirect. com/s cience/arti cle/pi j/S266660 30220 0015X?via %3Dih.ub
3	Optimized human action recognition paradigm using optimized type 2 neuro fuzzy classifier	Dr.Smitha I A	PERIODI CO di MINERA LOGIA	2022-23	0369- 8963	Volume 91, No. 4, 2022	10.37 6/ pd91. 91 44		https://periodic odimineral ogia.it /wp- content/up loads /2022/08/ 2022 91445.pdf
4	An efficient automatic brain tumout classification using optimized hybrid deep neural	Dr.Smitha J A	Elsevier	2022-23	2666- 6030	Volume 3, 2022, Pages 188-196	/j. ijin.20	indexed	https://w
5	Chimp optimized algorithm- based support vector machine for congestion control in WSN- Ion Social impact on online classes during lockdown	Dr.Smitha I A	nakarin Journal of Science and Technol ggy		3576	Vol.44 Issue 4, P907- 913	-	Scopus/ Web of SCience	-
6	Social impact on online classes during lockdown	P Ramkumar	IJARIIE		4396	Vol-8 Issue-2 2022			http://ijariie.co m/AdminUpload Pdf/Social impac t on Online class es during lockdo wn_ijariie16216. Pdf
7	Prediction of diabetic diseases using data analysis	P Ramkumar, Dr. B. Shadaksharapp a	journal of health sciences		2550- 6978		10.5373 0/ ijhs.v6n S1 .7364	review journal	https://sciences cholar.us/journa l/index.php/iihs /article/view/73 64
8	Investigation of deep fake images using pre-trained CNN frameworks	P Ramkumar	IGI GLOBAL	2022-23	1533-	Pages: 1	10.4018/9 78-1- 6684- 1558- 7.ch007	Scopus	https://www.igi global.com/cha p ter/investigatio n -of-deep-fake- images-using- pre-trained- cun- frameworks/30 9780

## **Faculty Book Publications**

Sl.	Name of the	Title/Topic	Publication	Year of.	Publications
No.	Faculty	10101 × 200 × 100		Publicatio	
				n	
1	Dr. B. Shadaksharappa,	Python Programming and	ISBN:	2021	Book Rivers
	Prof. P. Ramkumar	Its application	9789355150974		
2	Dr. B. Shadaksharappa,	Self-Learning approaches of	ISBN:	9 June	Book Rivers
	Prof. P. Ramkumar	Operating System	9789390548859	2021	
3	Dr. B. Shadaksharappa	Design and analysis of	978-9355150813	25	2
		algorithms		November	
4	Dr.B.Shadakharappa,	Practitioners guide to Data	ISBN:	2022	Scientific International
	Dr.Smitha J A	Science	978-93-5625-452-		Publishing House
			7		
5	Prof Mary Jasmine E	Python with data Analytics	ISBN:	2022	GCS Publihers
			978-93-94304-94-		
			9		
6	Dr.George Fernandez I	Blockchain Technology-	ISBN:	2022	Notion Press
		Handbook	9798888055601		
23					

7	Prof.Reji Thomas	Learn C Programming	ASIN:	2022	Kindle EDition
	Prof.M.Venkatesh Kumar		B0B3M96L2Y		
8	Prof.Reji Thomas Prof.M.Venkatesh Kumar	Let us Learn Operating System	ASIN : B0B6HL2T13	2022	Kindle Edition
9	Prof.Reji Thomas Prof.M.Venkatesh Kumar	JAVA For All	ASIN : B0B2VYLCBW	31 May 2022	Kindle Edition
10	Prof P.Ramkumar Prof M Sheela Devi	PROGRAMMING WITH PYTHON	ASIN: B09X6S1VT8	4 April 2022	Kindle Edition
11	Dr. B. Shadaksharappa, Prof. P. Ramkumar	Problem Solving Through Programming	9789355153654	22 May 2022	Book Rivers
12	Prof P.Ramkumar	Operating System Concepts	ASIN: B09SL12B8J	2022	Kindle Edition
13	Prof P.Ramkumar	Artificial intelligence	ASIN: B0BL8XJR4M	2 November	Kindle Edition
14	Prof P.Ramkumar	Problem solving techniques using python	ASIN: B09TSQ5KFH	2 March 2022	Kindle Edition

15	Prof P.Ramkumar	Data warehousing and data mining	ASIN: B0B6F6LGF4	12 July 2022	Kindle Edition
16	Prof P.Ramkumar	Teach Yourself Operating Systems	ASIN: B0B8CC36Y1	1 August 2022	Kindle Edition
17	Prof P.Ramkumar	Programming with java	9789390548361	2022	Book Rivers
18	Dr. B. Shadaksharappa, Prof. P. Ramkumar	Data warehousing and data mining	9789355151995	2022	Book Rivers
19	Prof P.Ramkumar Prof.REji Thomas	Modern Machine Learning Techniques	ASIN: B0BWW6SY7J	25 February 2023	Kindle Edition
20	Prof P.Ramkumar	Cloud Computing	9798390951422	11 April 2023	Kindle Edition
21	Prof P.Ramkumar Prof.REji Thomas	Bigdata Analytics	9798850682460	1 July 2023	Kindle Edition
22	Dr. B. Shadaksharappa, Prof. P. Ramkumar	Automata Theory & Computability	978-9358420487	5 June 2023	Book River
23	Dr. B. Shadaksharappa	Research methodology and publication ethics	978-9358420463	5 June 2023	Book River

24	Dr. B. Shadaksharappa	Database Management Systems	978-9358420500	5 June 2023	Book River
25	Dr. B. Shadaksharappa	Computer networks	978-9355157317	10 January 2023	Book Rivers
26	Dr. B. Shadaksharappa, Prof. P. Ramkumar	Object oriented programming with java laboratory	978-9355157232	10 January 2023	Book Rivers

## Patent Detail (2022-2023)

SI. No.	Patent Application No.	Status of Patent (Published / Granted)	Inventor/s Name	Title of the Patent	Patent Filed Date (DD/MM/YYY Y)	Patent Published Date / Granted Date (DD/MM/YYYY)
1	202041033065	Granted	Dr.Suresha Dr.Shrishail Kakkeri Sunil S Chandraprasad B S	Appratus and Method for producing Biodiesel fuel	01/08/2020	14/06/2023
2	202341003839	Published	Mrs.Karthika K	Big Data and Machine Learning	19/01/2023	17/02/2023

# **List of Placed students in various Companies**

S.No	Name of the Student	USN	Name of the Employer
1.			MINDTREE,
		1SB19CS00	TCS(P),
	Abhijit Deb	1	ACCENTURE(P)
			TECH MAHINDRA
2.	A Liziali. A	1SB19CS00	6D TECHNOLOGIES,
	Abijith A	2	ETHNUS
3.	Aditya Gupta	1SB19CS00 3	QSPIDER
4.	Anghaddeep Singh	1SB19CS00 4	QSPIDER
5.	Anjali R Kulkarni	1SB19CS00 6	ACADEMOR
6.	Autotiazzz	1SB19CS00	VEE TECHNOLOGY
	Anjali V.H	7	BYJU'S
7.	Arjun V Nair	1SB19CS00 8	VEE TECHNOLOGY
8.	Atul Yadav	1SB19CS01	6D TECHNOLOGIES,
	Atti Tatav	1	ACADEMOR
9.	B M Ganeshachary .	1SB19CS01 2	VEE TECHNOLOGY
10.	Bammidi Ketan Rao	1SB19CS01	TCS(P)
	Banimigi Ketan Kao	3	6D TECHNOLOGIES
11.	Bammidi Pragati Rao	1SB19CS01	TCS(DIGITAL)
	Dammidi Fragati Kao	4	ACCENTURE(P)
12.			MINDTREE
	Bhavya Jha	1SB19CS01 5	TCS
			JOHNSON CONTROL
13.			MINDTREE
	Bhuvan S	1SB19CS01 6	TCS
			JOHNSON CONTROL

# **Editorial Board**

2022-2023	Jan-June	"Sai Advaya"	DR. smitha. J.A	Sri Sairam college of Engineering,
		2022-2023	Prof. Reji Thomas	Anekal
		Vol-1_issue-1	Prof. c. Valarmathi	