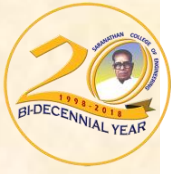# Saranathan College of Engineering
(Affiliated to Anna University Chennai)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

E magazine 7.0

COMSCEWAVE 2019

About us

The Department of Computer Science and Engineering was established in the year 1998 with the intake of 40 students initially. It was increased to 60 in 2000 and 120 in the year 2011. This program is affiliated to Anna University, Chennai. This immense growth is due to the efficient working of staff members and students. The department has the pride in showcasing its 100% of admission. With relentless efforts, the department has accomplished Accreditations by the **Institution of Engineers (IEI)** in the year 2015 and **National Board of Accreditation (NBA)** in the year 2018.

The department library is strategically placed to access to all the students. It spreads over an area of 100 sq. ft. It acts as a storehouse of knowledge with over 604 books including books with various domains in Computer Science and Engineering. Reference books are added to the Library every year. The department with its cohesive team of faculty members offers a sound program at the UG level. It shapes the students to keep up with the growing demands and changing trends of the software industry and research laboratories.

Apart from curriculum, the active participation of students in inter and intra college technical contests are being encouraged by the department to develop their interpersonal skills and the students have won many Best Project awards, Mobile App, Web Applications and Coder awards. Students are also actively participating in Infosys Foundation Programs(FP), TCS campus commune, TATA crucible project competition, and CSI Project Contests, etc.

VISION OF THE INSTITUTION

Impart an inclusive engineering education that beyond being a facilitator for a career and rudimentary skills, equips the students to offer ethically & environmentally conscious solutions to societal issues.

MISSION OF THE INSTITUTION

Develop the Institution into a Model Self Financing College of Engineering and Technology. Deliver Professional Training to our students with state-of-the art Laboratories and convert them into Technocrats of international repute.

1. Create a nurturing, holistic environment of engineering education to facilitate every student realize their full potential.
2. Strive to make the students strong in basic concepts armed with appropriate skills to enhance one's ability to apply the knowledge and provide solutions to real time issues.
3. Maintain an ambience that facilitates the students to strengthen their ethical value systems.
4. Actively promote R&D and institute-industry interaction.

VISION OF THE DEPARTMENT

To evolve as a centre of academic excellence and advanced research in Computer Science and Engineering discipline.

MISSION OF THE DEPARTMENT

1. To inculcate in students a profound understanding of fundamentals related to discipline.
2. To inculcate skills, attitudes and their applications in solving real world problems with an inclination towards societal issues and research.

3. To promote research in the emerging areas of computer science and technology

PROGRAMME EDUCATIONAL OBJECTIVE

PEO1: Acquire strong foundation in the mathematical, scientific and engineering fundamentals necessary to formulate, solve and analyse engineering problems.

PEO2: Develop the ability to analyse the requirements of the software, understand the technical specifications, design and provide novel engineering solutions and efficient software/hardware designs.

PEO3: Have exposure to emerging cutting edge technologies, adequate training & opportunities to work as teams on multidisciplinary projects with effective communication skills and leadership qualities.

PEO4: Have awareness on the life-long learning and prepare them for research development and consultancy.

PEO5: Have a successful career and work with values & social concern bridging the digital divide and meet the requirements of Indian and multinational companies

From the desk of the Principal

It is our effort to make SCE of Computer Science a top educational institution that can create IT professionals, who blend effectively, technological skills with management perspectives and to impart an inherent discipline that will help them face challenges in the future. Consequently the true education should deepen our insight, widen our horizon and create a meaningful outlook. Equally the students are fortunate enough to have born in a free nation, with all the facilities to shape their career in such a way, that they should be part of a good and healthy society with progressive attitude towards divinity.

Dr. D.Valavan
Principal

It gives me immense pleasure to lead the department of CSE. The department has well qualified and eminent faculty. The main objective of department is to develop the students both personally and professionally to achieve successful career in Industry, Research and Academics. Consequently, great advances have taken place in the field of computer science and engineering, bringing together the understanding of the scientific and technological foundations of computing, the concepts of software and hardware as well as those of communication technologies. The Department of Computer Science and Engineering endeavors to contribute to these advances through teaching and research in this field. The E magazine attempts to present the Department and its activities for general information to all concerned.
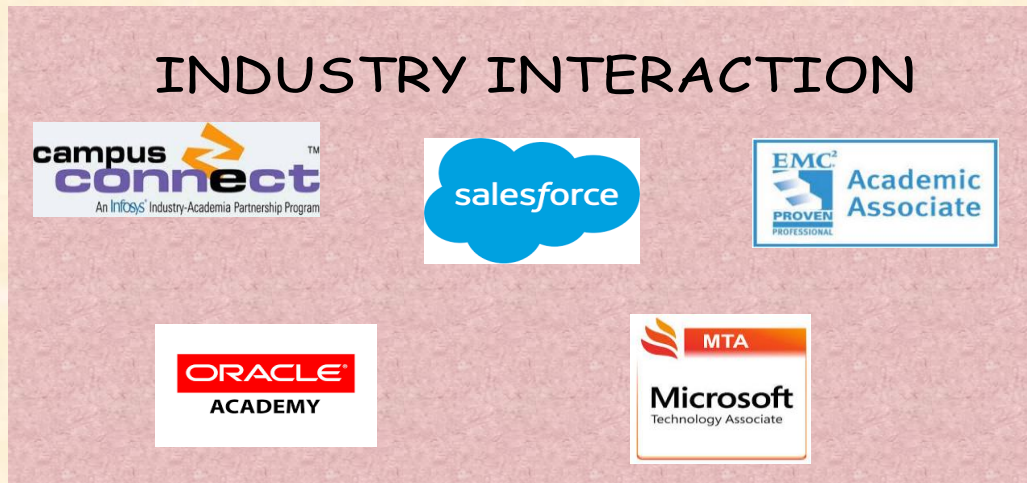
Dr. S.A.Sahaaya Arul Mary
HoD/CSE

Editor's Message

It gives us a great contentment to bring it to you the department magazine of CSE. This magazine is a platform to exhibit the innovative ideas of teachers and students. *COMSCEWAVE* presents the achievements of students and the contribution of staffs. We would like to extend our heartfelt gratitude to all those who have contributed to make this a success. we are thankful to all the authors who have sent their articles. We truly hope that the following pages will keep you attached to this magazine.

K.Mohanappriya AP/CSE
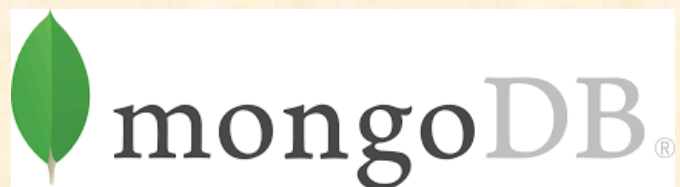
Industry Interaction

INDUSTRY INTERACTION

Microsoft Technology Associate(MTA) Courses

Courses	No.of Students Certified
Database Fundamentals (III Year)	89
Python (II Year)	103

Departments Events

Workshop Organized

- **Three days workshop on "JQuery, MongoDB and Android Programming "have been organized for III year CSE students from 3rd Dec-2018 from 5th Dec 2018**

- **Three days workshop on AWS cloud Practitioner has been organized for IV year students from3rd Dec-2018 from 5th Dec 2018.**

- **Three days workshop on "Web Development "have been organized for II year CSE students from 28th Nov-2018 from 30th Nov 2018.**

Project Expo

- Project competition has been organised for I,II and III year students to exhibit their talents in app development and mini projects on 19.3.2019

- Totally 50 teams has participated in the preliminary round of Project Expo and exhibited their talents.

- 19 teams have been shortlisted to present their project in the final round on 20.3.2019.

The highlighted projects are

- ✓ *Brain Game*
- ✓ *Aadhaar Security through Blockchain*
- ✓ *Digital Voting System*
- ✓ *Online College bus Tracking System*
- ✓ *Hamlet Hunt*

Students Awards and Participations

Students Achievements

- ✓ **K.Kamalesh** II CSE **& his teams of ECE** has participated in **SIH** held at Dehradun and won the first prize worth Rs 1,00,000
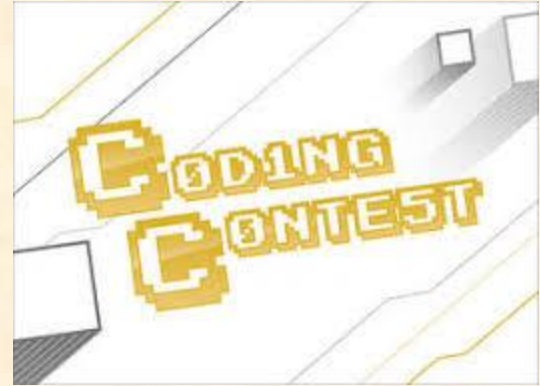

- ✓ **G.R.Thayalan, RohitRaj, Madhubala, Keerthana, Janani and @@@** has participated in **SIH** at WestBengal and cleared the first three rounds of evaluation.

- ✓ **K.Ranjani and N.Jusmitha** of III CSE has participated in Paper Presentation and Technical event organized by Dept of Information Technology at **University College of Engineering , BIT Campus, Trichy** on 1st and 2nd March 2019 and won First Prize with the cash award of Rs 2500

- ✓ **V. Varshini** of II CSE has participated and secured second prize with cash award of Rs 1000 in DAKSH'19 - Idea Presentation held at **SASTRA University** , Tanjore from 22nd to 24th Feb 2019

- ✓ **N.Jusmitha** of III CSE has participated in Paper Presentation and Technical event organized by Dept of Information Technology at University College of Engineering, BIT Campus, Trichy on 1st and 2nd March 2019

- ✓ **S.Nivetha** of III CSE has participated in TechCharade event organized by Dept of Information Technology at University College of Engineering, BIT Campus, Trichy on 1st and 2nd March 2019 and won 2nd prize.

- ✓ S.Nivetha and J.Pavithra of III CSE has participated in Bug Me and Stump the stars event conducted at Holycross College , Trichy on 26th Feb 2019 and won 1st prize.

- ✓ K.Thenmozhi of III CSE has participated in Debugging and Paper Presentation event held at Bishop Heber Collge, Trichy on 1st March 2019 and won the Best Performer Award .

CSI- InApp National Student Project Awards 2019

- ✓ Veeraharish M and his team members project has been shortlited for the second round in CSI-InApp Awards. The project title As Transcoder like realtime call translation

CSI-InApp Awards
Published on 15-03-2019

1st Round Evaluation Results
CSIN InApp National Student Project Awards 2019

The following projects have been shortlited for the second round. The second round evaluation schedule may be found along. More details to be published soon.

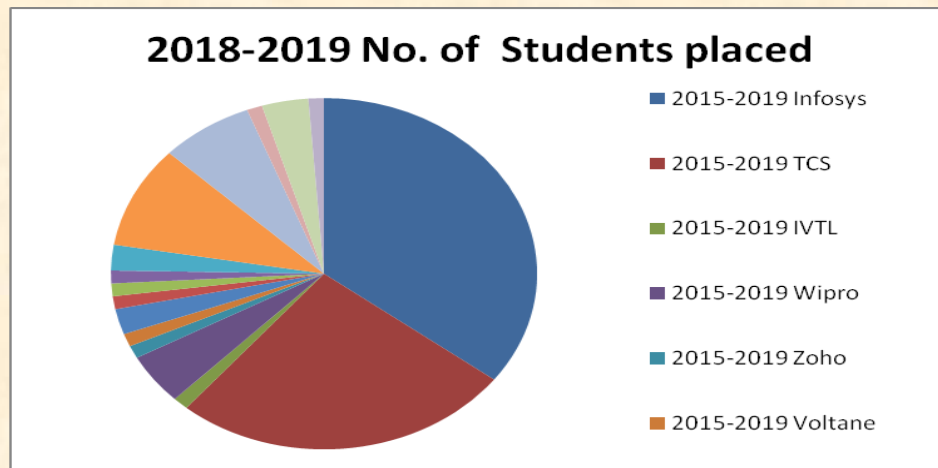| #	Project ID	Project Name	College	Second Round Schedule	Time Slot
1	CSIN10	Litter detection using UAV	Vidya Vikas Institute of Engineering and Technology	30 March 2019	9:30 - 10:00 am
2	CSIN15	Character Recognition Using Hand Gestures	College of Engineering Karunagappally	30 March 2019	10:00 to 10:30 am
3	CSIN53	ANALOGOUS DOCUMENT RETRIEVAL USING TF-IDF AND KNN ALGORITHMS	Aditya Engineering College	30 March 2019	10:30 - 11:00 am
4	CSIN70	Anomalous Activity Detection for Intelligent Visual Surveillance	Sree Chitra Thirunal College of Engineering	30 March 2019	11:15 - 11:45 am
5	CSIN76	Live Face	Sri Sai Ram Engineering College	30 March 2019	11:45 - 12:15 pm
6	CSIN78	SWINDLE DETECTION USING MACHINE LEARNING AND DEEP LEARNING TECHNIQUES	Aditya Engineering College	30 March 2019	12:15 - 12:45 pm
7	CSIN104	Automated Hand Gesture Detection Using Raspberry Pi	Aditya Engineering College	30 March 2019	12:45 - 1:15 pm
8	CSIN115	Food for All I Nosh	St. Joseph's College of Engineering and Technology, Palai	30 March 2019	2:00 - 2:30 pm
9	CSIN116	GoSell	Sree Chitra Thirunal College of Engineering	30 March 2019	2:30 - 3:00 pm
10	CSIN118	Ranking Candidates by Emotional Analysis (RCEA approach)	Sree Chitra Thirunal College of Engineering	30 March 2019	3:15 - 3:45 pm
11	CSIN137	[Fulcrum] Design and Development of Cognitive Therapy System for stress relief by emotion perception using AI	Jerusalem College of Engineering	30 March 2019	3:45 - 4:15 pm
12	CSIN138	Smart Waste Bin	Sree Chitra Thirunal College of Engineering	30 March 2019	4:15 - 4:45 pm
13	CSIN140	Gender Classification from GAIT Energy Image using Machine Learning and Computer Vision	Charotar University of Science and Technology	30 March 2019	4:45 - 5:15 pm
14	CSIN152	Predictive Maintenance	Christ College of Engineering	30 March 2019	9:30 - 10:00 am
15	CSIN167	Personality and Disease Detection by Graphological Methods Using AI	Amal Jyothi College of Engineering	30 March 2019	10:00 to 10:30 am
16	CSIN170	Transcoder	Saranathan College of Engineering	30 March 2019	10:30 - 11:00 am
17	CSIN174	Lifeline	BVRIT Hyderabad College of Engineering	30 March 2019	11:15 - 11:45 am
18	CSIN183	REAL TIME TRANSLATIONS OF MALAYALAM NOTICE BOARDS TO ENGLISH DIRECTORIES	TocH Institute of Science and Technology	30 March 2019	11:45 - 12:15 pm
19	CSIN231	ASSISTIVE TECHNOLOGY FOR THE BLIND	Mar Baselios College of Engineering and Technology	30 March 2019	12:15 - 12:45 pm
20	CSIN232	Zonal based speed limit controller	LBS INSTITUTE OF TECHNOLOGY FOR WOMEN	30 March 2019	12:45 - 1:15 pm
21	CSIN245	AN EFFICACIOUS e-PORTAL FOR RANCHER TO BUY SEEDS AND HUMUS	IFET College of Engineering	30 March 2019	2:00 - 2:30 pm
22	CSIN251	Produce Preservation System	Mar Baselios College of Engineering and Technology	30 March 2019	2:30 - 3:00 pm
23	CSIN255	Autism Detection using Eye Gaze Tracking	Army Institute of Technology	30 March 2019	3:15 - 3:45 pm
24	CSIN261	Smart Farm Diary	Sri Ramakrishna Engineering College	30 March 2019	3:45 - 4:15 pm

1

Students Participation in Technical Events

S.NO	Student Name	Event Name	From date	To date	Organized by (dept name / org. name)
1	K.Ranjani	Paper Presentation & Technical event	01-Mar-19	02-Mar-19	Dept of Information Technology
2	N.Jusmitha	Paper Presentation & Technical event	01-Mar-19	02-Mar-19	Dept of Information Technology
3	K.Thenmozhi	State Level Technical Symposium	01-Mar-19	01-Mar-19	Bishop Heber College Autonomous
4	K.Swathi	State Level Technical Symposium	01-Mar-19	01-Mar-19	Bishop Heber College Autonomous
5	Vignesh Raj S	DAKSH'19 - Dev Apps,Idea Presentation	22-Feb-19	24-Feb-19	SASTRA Deemed University
6	Vigneshwaran B	DAKSH'19 - Dev Apps,Idea Presentation	22-Feb-19	24-Feb-19	SASTRA Deemed University
7	Veera Harish M	DAKSH'19 - Dev Apps,Idea Presentation	22-Feb-19	24-Feb-19	SASTRA Deemed University
8	Vinotha P	Alexa Workshop	22-Feb-19	24-Feb-19	SASTRA Deemed University
9	Kavi Kumaran S	Alexa Workshop	22-Feb-19	24-Feb-19	SASTRA Deemed University
10	Janai R	Data Analytics-R Workshop	01-Feb-19	03-Feb-19	VORTEX 2019 NIT Trichy
11	Jeyashree Selvaraj	Data Analytics-R Workshop	01-Feb-19	03-Feb-19	VORTEX 2019 NIT Trichy

Our Recruiters

Infosys

Volanté
Payments Solutions for the Digital Age

ZOHO

TATA
TATA CONSULTANCY SERVICES

VEE TECHNOLOGIES
Extraordinary Outcomes

vuram
Services, Redefined.

Cognizant

EXCELACOM
CONSULTING AND TECHNOLOGY SOLUTIONS

wipro

Infoview

Placement Details

2018-2019 No. of Students placed

Legend:
- 2015-2019 Infosys
- 2015-2019 TCS
- 2015-2019 IVTL
- 2015-2019 Wipro
- 2015-2019 Zoho
- 2015-2019 Voltane

2018-2019		
Students Batch	**Company Name**	**No. of Students placed**
2015-2019	Infosys	30
	TCS	22
	IVTL	1
	Wipro	4
	Zoho	1
	Voltane	1
	Cognizant Technology Solutions	2
	Vuram Technologies	1
	Excelacom Technologies	1
	Shiash Technologies	1
	SLN Technologies	2
	Vee Technologies	8
	Savy Technologies	6
	Globe Touch	1
	MedExperts	3
	Visual BI	1

Faculty Contributions

Faculty Development Programme

FACULTY PUBLICATIONS

Certified Trainer

Faculty Contributions

KNOWLEDGE ENRICHMENT THROUGH FDP

- Mr.R.Mohankumar has participated in TEQIP III sponsored Two days workshop on "Festival of learning Internet of Things – Cloud" organized by Department of Information Technology at Thiagarajar College of Engineering, on 15th & 16th November 2018.

- Ms.K.Mohanapriya has participated in 5 days of FDP sponsored by ICT academy on "Hadoop-Horton Networks" organized at Periyar Maniammai University, from 11th to 15th December 2018.

- Ms.R.Sharanya has participated in Two days FDP on "DataScience/ Analytics with Python ad its Applications" organized by Be Positive Institute for Skilling Pvt Limited ,Trichy on 14th & 15th December 2018.

- Mr.R.Karthik has participated in 6 Days Deep dive Faculty enablement Program on LEX based foundation Program conducted by Infosys, at Karpagam college of Engineering, Coimbatore from 3rd Jan 2019 to 9th Jan -2019.

Publications of Faculty

- Mr.S.Venkatasubramanian ," Aadhar Security through Block chain", 4th International Conference on Current Research in Engineering Science and Technology, Jayaram College of Engineering & Tech with Seventh Sense Research Group on 8.3.2019

- T.Sathiskumar ," Secure Sharing of Personal Health Record in Cloud Environment", IJIRCCE, 01-02-2019,Vol 7,Issue 2,ISSN-2320-9801

- Dr.P.L.Rajarajeswari, " A Smart Patient Monitoring System Implementation towards IoT Connected Healthcare Applications ", JETIR, March 2019,Vol 6 ,Issue 3,ISSN 2349-5162
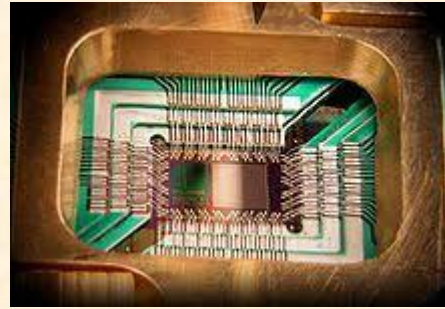
TECHNICAL ARTICLES

Technical jokes

- What do you call a computer floating in the ocean?

  A Dell Rolling in the Deep.

- What is written on Steve Jobs tombstone?

  iCame, iSaw, iConquered, iLeft, iCameBack, iThinkDifferent, iMac, iPod, iTunes, iPhone, iPad, iCloud, iRIP

- Why do Java developers wear glasses?

  Because they don't C#.

- What do you call a ride sharing app that serves breakfast?

  EggsUber Easy.

- What do you call having your grandma on speed dial?

  Instagram.

- What did the cat on the smart phone say? Can you hear meow?

  Because it left its windows open.

- What is an astronaut's favorite place on a computer?

  The Space bar!

- What do you call a woman you married off the internet?

  Wife-I.

- How do you get a computer drunk?

  A Screenshot of Tequila.

D-Wave system

The D-Wave system has a web API with client libraries available for C/C++, Python, and MATLAB. This allows users to access the computer easily as a cloud resource over a network. To program the system, a user maps a problem into a search for the "lowest point in a vast landscape," corresponding to the best possible outcome. The quantum processing unit considers all the possibilities simultaneously to determine the lowest energy required to form those relationships. The solutions are values that correspond to the optimal configurations of qubits found, or the lowest points in the energy landscape. These values are returned to the user program over the network. Because a quantum computer is probabilistic rather than deterministic, the computer returns many very good answers in a short amount of time—thousands of samples in

one second. This provides not only the best solution found but also other very good alternatives from which to choose. D-Wave systems are intended to be used to complement classical computers. There are many examples of problems where a quantum computer can complement an HPC (high-performance computing) system. While the quantum computer is well suited to discrete optimization, for example, the HPC system is better at large-scale numerical simulations.

Slack

Slack has added new ways to interact with Microsoft's Office 365 app directly from its own collaboration platform. This includes an Outlook calendar app, Office file previews and the ability to export emails into Slack channels and direct messages. The integrations announced are part of wider moves to connect Slack with productivity apps from a range of vendors, said Andy Pflaum, Slack's director of product management for interoperability. The variety of third-party app integrations has long been a strength of Slack's (it has added more than 1,500 so far), helping users work without forcing a switch between applications. The list of integrations includes productivity and business apps from vendors such as Google, ServiceNow and Salesforce.

Robotic Process Automation or RPA

Like AI and Machine Learning, Robotic Process Automation, or RPA, is another technology that is automating jobs. RPA is the use of software to automate business processes such as interpreting applications, processing transactions, dealing with data, and even replying to emails. RPA automates repetitive tasks that people used to do. These are not just the menial tasks of a low-paid worker: up to 45 percent of the activities we do can be automated, including the work of financial managers, doctors and CEOs.

The extra lenses in your smartphone's camera

Dual-lens? Triple-lens? Do more lenses matter? Go shopping for a smartphone today and one of the features you'll want to pay close attention to is the rear-facing camera, which may come with multiple lenses. Each camera has a lens for directing light and a sensor for capturing it, both of which affect the quality of the finished shot. In recent years, manufacturers have added more and more lenses to the back camera, spawning designations such as "dual-lens" and "triple-lens." The upper end of the spectrum is occupied by phones such as the Nokia 9 PureView, which has five, but is more really better? What exactly do these extra lenses do? Quite simply, these lenses fit more in the shot, whether it's a sweeping landscape or a row of friends' faces. They're the equivalent of taking a few paces back with a standard camera so you get more in the frame. Ultra- or super-wide lenses, of course, let you take more figurative steps back. A bit of distortion might creep into photos taken with an ultra-wide lens, but the best modern-day smartphones can make the necessary adjustments to keep everything looking as natural as possible. Some flagship phones now feature an ultra-wide lens, including the recently unveiled Samsung Galaxy S10. Plenty of others (including the iPhone XS Max) have a wide-angle lens or two, so it's something to look for if you think you'll need it. In the camera specs, look at focal length (measured in millimeters) and field of view (measured in degrees) to understand how much is going to fit in a photo. Lower focal lengths and higher fields of view allow you to capture more of a scene. Some phones also come equipped with wide or ultra-wide lenses on the front for better group selfies.

Photo Gallery

Smart India Hackathon 2019--project under category is "Innovative Ideas in Smart Communication".

Workshop Events

Android Programming,MongoDB Workshop Organized -Dept of CSE

Sports Achievements

Sl.No	Name of the Player	YEAR	LEVEL	EVENT	Position
	ANNA UNIVERSITY ZONAL & INTERZONAL RESULTS 2018-2019				
1	G.PREETHA	II	INTER ZONAL	TAEKWONDO	GOLD
2	ABINASH.R	II	AU ZONAL LEVEL	TABLE TENNIS(M)	RUNNER
3	PR.DHYAANI	IV			
4	N.MARTINA	IV	AU ZONAL LEVEL	BASKET BALL (W)	WINNERS
5	A.MUTHUPRIYANKA	IV			
6	ISWARAYA LAKSHMI.S.T	IV			
7	N.MARTINA	IV	AU ZONAL LEVEL	BADMINTON(W)	THIRD
8	RESHMAFATHIMA	III			
9	UMAMAHESWARI.T	III	AU ZONAL LEVEL	VOLLEY BALL(W)	RUNNER
10	M.VINOTH	III	AU ZONAL LEVEL	FOOT BALL	THIRD
11	MOHAMMED NABEEM	III	NATIONAL LEVEL SPORTS FEST SASTRA	BEST PHYSIQUE	GOLD MEDAL & Mr.COLOSSEUM
			INTER NATIONAL SPORTS & CULTURAL CARNIVAL VIT		GOLD MEDAL
			DISTRICT LEVEL		GOLD
12	MOHAMMED NABEEM	III	AU ZONAL LEVEL	4X100 Mts Relay	I PLACE
13	A.MUTHUPRIYANKA	IV	AU ZONAL LEVEL	High Jump	I PLACE
14	A.MUTHUPRIYANKA	III		4X100 Mts Relay	II PLACE

G.Preetha of II CSE has participated in TAKEWONTO competition held during from 7th March 19 to 19th March 19 at Haryana and won Gold medal