JANSONS

INSTITUTE OF TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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TECHNOPHILE 08

VISION OF THE INSTITUTION

To germinate and develop a unique brand of engineers who will be change agents in the field of technology.

MISSION OF THE INSTITUTION

To impart quality value-based Technical Education. To prepare and strengthen young minds for their future prospects. To inculcate ethical standards and passion towards sustainable development.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ABOUT

The Department of Computer Science and Engineering was established in 2009 with a yearly intake of 90 students. The Department has a comprehensive curriculum on topics related to all aspects of Computer Hardware and Software with an emphasis on practical learning.

The course is affiliated with Anna University, Chennai, having up-to-date courses on embryonic topics to equip our students with the latest developments. The Department provides an outstanding education and research environment complemented by excellence in teaching. The Department has state of the art infrastructure and computing equipment supported by high-speed Ethernet and Internet facilities.

Our faculty members aim to deliver top class education blending their rich research experience with classroom teaching. The Department takes special efforts to reduce the gap between Industry and Institute by inviting prominent persons from industries to interact with students. Computer Science and Engineering is a vital branch for all Engineering and Technology area.

It gives lot of exposure to diversified Engineering areas like telecommunication, satellite image analysis, weather forecasting, software development, Business Process Outsourcing and medical fields in enhancing the human lifestyle. Hence the employment potential is very high for Computer Science Engineers.

VISION OF THE DEPARTMENT

To produce qualified, self-driven professionals in the field of computer science and engineering.

MISSION OF THE DEPARTMENT

To impart quality education towards producing budding professionals in the field of computer science and engineering. To sculpt young minds and empower them in pursuit of meeting their future career demands. To inculcate moral values to become socially responsible, ethical, and competitive professionals towards viable growth.

Program Educational Objectives (PEOs)

- ♦ Graduates will be computing professionals who perform and lead design, development, and project operations in the software and information technology industries.
- ♦ Graduates will pursue higher education, be involved in research, or become entrepreneurs.
- ♦ Graduates will be ethically, socially, and environmentally responsible and contribute to society and the country.

Program Outcomes POs:

Engineering Graduates will be able to:

A. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

B. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

C. **Design/development of solutions:** 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.

D. Conduct investigations of complex problems: 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.

E. Modern tool usage: 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.

F. The engineer and society: 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.

G. 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.

H. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

I. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

J. Communication: 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.

K. Project management and finance: 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.

L. Life-long learning: 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.

Program Specific Outcomes (PSOs)

♦ Analyse, design, and develop computing solutions by applying foundational concepts of computer science and engineering.

♦ Apply software engineering principles and practices for developing quality software for scientific and business applications.

♦ Adapt to emerging information and communication technologies to innovate ideas and solutions to existing or novel problems

Faculty Members:

S.NO	FACULTY NAME	DESIGNATION
1	Velayudham A	Professor
2	Shamila E S	Professor
3	Usha S	Assoc.Professor
4	Praveena A	Asst.Professor
5	Jansirani S	Asst.Professor
6	Vivek M	Asst.Professor
7	Krishna Priya M S	Asst.Professor
8	Kiruba Priyadharshini V	Asst.Professor
9	Pavithra M	Asst.Professor
10	Ashwini R	Asst.Professor
11	Savitha R	Asst.Professor
12	Gowsikraja P	Asst.Professor
13	Rubhashree M	Asst.Professor
14	Sakthi P	Asst.Professor
15	Vijipriya G	Asst.Professor
16	Savitha N	Asst.Professor
17	Anitha Mary M	Asst.Professor
18	Sharrath M	Asst.Professor
19	Sasikala T	Asst.Professor

20	Saravanakumar M	Asst.Professor
21	Srihari Shankar S M	Asst.Professor
22	Prasathkumar V	Asst.Professor
23	Vishnupriya A V	Asst.Professor

Student Achievement's:

Student Name	Department & Year	Achievement
Alagu Esakkiammal N	CSE & IV	II Prize in "Crash Your Code" at "Info Institute of Engineering" on 13.05.2022
Giri Pragadheesh K	CSE & IV	Runner Up "based manhole detection and monitoring system" at "Saintfits College of Engineering" on 25.04.2022 & 26.04.2022
Jignesh M	CSE & IV	Runner Up "based manhole detection and monitoring system" at "Saintfits College of Engineering" on 25.04.2022
Gowtham P K	CSE & IV	Runner Up "based manhole detection and monitoring system" at "Saintfits College of Engineering" on 25.04.2022 & 26.04.2022
Harish Kumar R	CSE & IV	Runner Up "IoT based manhole detection and monitoring system" at "Saintfits College of Engineering" on 25.04.2022 & 26.04.2022

Conference, Symposium, Workshops, Seminar, Competitions, Guest Lectures:

Title	Category	Resource Person	Date
Webinar on "Exploration on the role of Cryptography in Network Security"	Guest Lectures	Dr.P.Priya Ponnusamy Assistant Professor Department of Computer Science and Engineering PSG Institute of Technology and Applied Research, Coimbatore	22.11.2022
A Webinar on "Skill Development For CLean Coding and DevOps"	Webinar	___	01.11.2022
Seminar on "Effective Problem Identification Techniques & Strategies"	Seminar	___	18.10.2022

Clubs of CSE:

1)Computer Society of India

Computer Society Of India (CSI) was formed in 1965, since then CSI has been instrumental in guiding the Indian IT industry down the right path. Today, the CSI has 72 chapters all over India, 511 student branches, and more than 100000 members (IT industry leaders, brilliant scientists and dedicated academicians). Jansons Institute of Technology has started CSI – Student Branch in the academic year 2020-2021. By joining this student chapter, students can gain access to CSI knowledge portal through Login-id and password. They can gain technology updates through Conferences, Seminars, Tutorials & workshop at discounted rates. It can act as a forum for activities like Paper Presentations, Quiz, Competitions and Exhibitions. They can have the Ability to connect with Distinguished speakers on different technology areas and dedicated Academicians through Networking.

2)Iterator's Club

The Iterators programming Club is a platform where the students will be able to develop and learn various skills like, Computer coding. The club is focusing on conducting events like program coding, debugging , Hackathon and workshop for the students to improve their coding and analytical, problem solving skills and techniques. This club focuses on establishing a coding background culture to involve the students to build the logical and analytical skills to support computer programming as a plan to fit for the Software development industry needs.

Objective:

Enhance Programming and Application Development Skill

Outcome:

– Gain in-depth knowledge in coding
– Develop logical thinking and problem solving skills
– Effective and cooperative team work
– Use open source platforms

3)AndriOS club

Android is a mobile operating system (OS) currently developed by Google, based on the Linux kernel and designed primarily for touchscreen mobile devices such as smartphones and tablets. Android's user interface is mainly based on direct manipulation, using touch gestures that loosely correspond to real-world actions, such as swiping, tapping and pinching, to manipulate on-screen objects, along with a virtual keyboard for text input. In addition to touchscreen devices, Google has further developed Android TV for televisions, Android Auto for cars and Android Wear for wrist watches, each with a specialized user interface.

JIT AndriOS club has been initiated for the students who are dynamic and ambitious and who wish to take the field of Android technology to a higher pedestal. The Club AndriOS helps members to Learn & Innovate their own product.

Motto:

Deliver an ideal app that will help community in achieving the targeted objective

Vision:

To look out on the automated fields of daily life and have always tried to automate them by integrating with newer and innovative ideas.

Mission:

To educate the members of AndriOS in developing applications using Android and iOS technology with development tools, and to give them a strong base in Application development.

Department Events:

JANSONS INSTITUTE OF TECHNOLOGY
Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai
Accredited by NAAC & ISO 9001 : 2015 Certified Institution
Coimbatore, Tamil Nadu – 641 659

Department of Computer Science and Engineering
Organizes
Guest Lecture
On
"Exploration on the role of Cryptography in Network Security"

Resource Person
Dr.P.Priya Ponnusamy, M.E, Ph.D
Assistant Professor (Selection Grade)
Department of Computer Science and Engineering
PSG Institute of Technology and Applied Research, Coimbatore

Date – 22.11.2022
Time - 02:30 PM - 03:30 PM

Guru Prasath (glguru2004@gmail.com) is signed in
Link :https://meet.google.com/qps-vetn-dwy

Webinar on "Exploration on the role of Cryptography in Network Security "

Date: 22-11-2022

Time: 02:30 PM – 03:30 PM

Resource Person:

Dr. P. Priya Ponnusamy

Assistant Professor (Selection Grade)

Department of Computer Science and Engineering

PSG Institute of Technology and Applied Research, Coimbatore

The Department of Computer Science and Engineering organized a Guest Lecture on "Exploration on the role of Cryptography in Network Security" on 22.11.2022. The session was taken forward through hybrid mode.

Dr. P. Priya Ponnusamy, Assistant Professor (Selection Grade), Department of Computer Science and Engineering, PSG Institute of Technology and Applied Research, Coimbatore was the Resource Person for the Session. She interacted and shared her knowledge on experience and importance of IPSec incorporates two protocols AH and ESP which gives security to IP packets and AH gives authentication and protects integrity. The outcomes were discussed clearly among the participants. Participants were briefed about how,

- To understand basics of Cryptography and Network Security.

- To be able to secure a message over insecure channel by various means.

- To learn about how to maintain the Confidentiality, Integrity and Availability of a data.

- To understand various protocols for network security to protect against the threats in the networks.

- To design network application security schemes, such as PGP, S/ MIME, IPSec, SSL/TLS.

- To understand the current legal issues towards information security.

The Webinar Talk was well attended by over 62 participants from Final Year CSE. The feedback received was very commendable in all aspects.

A Webinar on "Skill Development For CLean Coding and DevOps"

A Webinar on "Skill Development For Clean Coding & Devops" was conducted by Andrios Club, CSI Student Chapter and Iterators club on 01.11.2022. The session started with an opening note of the event by Rashmitha of III CSE. The Chief Guest of the Session stared the session with an Introduction to Clean Coding.

Clean coding is code that is easy to understand and easy to change. The following criteria makes code easy to understand:

- easy to understand the execution flow of the entire application

- easy to understand how the different objects collaborate with each other

- easy to understand the role and responsibility of each class

- easy to understand what each method does

- easy to understand what is the purpose of each expression and variable

Publications:

I. Rubhashree M, et al. (2022), "Design of Modified AES Algorithm For End-ToEnd Data Security", International Journal of Research And Analytical Reviews, E-ISSN 2348-1269, P- ISSN 2349-5138, Volume 9, Issue 04, , pg : 82 – 85, June 2022

II. Shamila E S, et al. (2022), "Automated Public Settings for Physically Disabled Persons", International Journal of Creative Research Thoughts, ISSN : 2320 – 2882, Volume 10, Issue 6, pg: 266 – 270, June 2022

III. Shamila E S, et al. (2022), "A Contemporary Adaptive Neuro-Fuzzy Inference Fire Warning System for Physically Challenged Persons using IoT", International Journal of Research and Analytical Reviews, E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.9, Issue 2, pp.979-983, June 2022

IV. Shamila E S, et al. (2022), "A Machine Learning Based Health Assistant System for Disabled", International Journal of Research and Analytical Reviews, E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.9, Issue 2, pp.988-991, June 2022

V.   Shamila E S, et al. (2022), "A Smart Graphic Eye for Visually Impaired With Text-To-Speech Converter", Journal of Emerging Technologies And Innovative Research, ISSN-2349-5162, Volume 9, Issue 6, pg : 23 to 28, June 2022

VI.   Sharrath M, et al. (2022), "Stock Price Prediction using Long Short-Term Memory", International Journal of Creative Research Thoughts, ISSN : 2320-2882, Volume 10, Issue 6, pg : 428 – 431, June 2022

VII.   Sharrath M, et al. (2022), "Patient Health Monitoring System Using IoT", International Journal of Creative Research Thoughts, Volume 10, Issue 6, ISSN : 2320-2882, pg: 416 – 422, June 2022

VIII.   Sakthi P, et al. (2022), "Accident Detection and Alert System using GPS and GSM", International Journal of Creative Research Thoughts, ISSN:2320-2882, Volume 10, Issue 7pg :679 – 683, July 2022

IX.   Rathika A, et al. (2022), "Cloud Based Medical Health Care System using Internet of Medical Things", International Journal of Research and Analytical Reviews, E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.9, Issue 2, pp.915-920, June 2022

X. Rathika A, et al. (2022), "Image Encryption using Combined Chaos and Memory Cellular Automata", International Journal of Creative Research Thoughts, ISSN : 2320-2882, Volume 10, Issue 6, June 2022

XI. Gowsikraja P, et al. (2022), "RFID Based Virtual Toll Collection System Using IoT", International Journal of Creative Research Thoughts, ISSN : 2320 – 2882, Volume 10, Issue 6, June 2022

XII. Gowsikraja P, et al. (2022), "Object Detection Using HAAR Cascade Machine Learning Algorithm, International Journal of Creative Research Thoughts , ISSN : 2320-2882, Volume 10, Issue 6, June 2022

XIII. Ashwini R, et al. (2022), "Detection of Phishing Websites using an Efficient Deep Learning Framework", International Journal of Creative Research Thoughts, ISSN : 2320-2882, Volume 10, Issue 6, June 2022

XIV. Savitha R, et al. (2022), "Vehicle Anti-Theft System Using PCA Algorithm", International Journal of Creative Research Thoughts, ISSN : 2320 – 2882, Volume 10, Issue 6, ISSN: 2320- 2882, June 2022

Book Chapters

I. Dr. A. Velayudham, Mrs. M. Pavithra, Mrs. R. Ashwini (2022), published a Book chapter titled," Emerging Trends in Data Science, Artificial Intelligence and Machine learning", AN Publications, 978-81-955856-9-4, December, 2022.

Books

I. Dr. A. Velayudham, Mrs. M. Pavithra, Mrs. R. Ashwini (2022), published a Book titled, "Problem Solving and Python Programming", Charulatha Publications, ISSN: 978-93-5577-372-2, December 2022.

II. Dr. A. Velayudham (2022) published a Book titled, "Handbook on Artificial Intelligence and Machine Learning", Scientific International Publishing House, ISSN: 978-93-5625-575-3, December 2022

"Computers are incredibly fast, accurate, and stupid. Human beings are incredibly slow, inaccurate, and brilliant. Together they are powerful beyond imagination."

- Albert Einstein