

ST. XAVIER'S COLLEGE (AUTONOMOUS) PALAYAMKOTTAI - 627 002

(Recognized as "College with Potential for Excellence" by UGC & Accredited by NAAC at A++ Grade with a CGPA of 3.66 out of 4)



ANNUAL REPORT 2022-2023 DEPARTMENT OF COMPUTER SCIENCE (SHIFT- I)

Computer Science Association was inaugurated on 12.08.2022. Rev. Dr. T. Meyyappan, Head, Department of Computer Science, Alagappa University, Karaikudi, was the chief guest. An Alumni meeting was organized on 02.10.2022. A career guidance program is held on 20.12.2022. Mr. Maria Antony Samy, System Analyst, OOR Cabs Pvt. Ltd., Chennai was invited as the Resource person.

Our students have won third prize in the intra departmental Pongal competition held on 13.01.2023. Er. S. Selvakumar, Software Analyst, Beviwise Network, Tirunelveli has given a talk on "Anticipation of Software Industries" on 19th January, 2023. A motivational talk ios given by Rev. Dr. M. Xavier Rex, Principal, Carmel Academy, Mandamarri, Telangana on 27.01.2023.

A Seminar on 'Challenges in IT Industries' was held on 15.01.2023. Mr. S. Tony Walter James, Director, Zoi Fintech, Mumbai was invited as the Resource Person. Our students Mr. J. N. Allwin Immanuel and Mr. G. Joachim Bharathi participated as NCC Cadets on the 74th Republic Day Parade held on 26.01.2023 at New Delhi.

Our department students have won the third prize in the "SXC@100 EXHIBITION 2023" was held from 30.012023 to 03.02.2023. Mr. E. Dhanusan and Mr. K. Sakthivel won the third prize in Chief Minister's football Tournament held at Anna Stadium, Tirunelveli on 12.02.2023. A state level intercollegiate tech meet XPASO'23 was held on 28.02.2023. Around 250 students from 31 different colleges have participated in ten different events. Mr. Alex, Managing Director, DParkz and Mr. Aravind, Vijay Television were the guests of honor and distributed the Prizes.

DEPARTMENT OF COMPUTER SCIENCE (Shift – II)

International Youth Day Special Digital Poster Competition was conducted on **12.08.2022** by Xaverian Association of Computer Science (XACS). The Theme of the Competition was 'Intergenerational Solidarity-Creating a World for All Ages'. Thirty-Six

Students from the Department have participated in the Competition. Rubik's Cube Training programme was organized on 16.08.2022 by Xaverian Association of Computer Science (XACS). Mrs. L. Sujatha, Assistant Professor, Department of Computer Application served as resource person. Fifty-one Students have participated in the Training programme. **Inauguration** Function of Xaverain Association of Computer Science(XACS) & CSE Forums was held on 23.08.2022. Mr. P. Rajarathnam, Sub-Inspector of Police, Cyber Crime Cell, Tirunelveli has served as the Chief Guest. World Photography Day Photography Competition was conducted by Steve Jobs CSE Fine Arts Forum on 22.08.2022. The Theme of the Competition was 'Gender Equality'. Rubik's Cube Special Performance and Rubik's Cube Competition was organized on 25.08.2022 by Xaverian Association of Computer Science (XACS). Master J.Yuwin Herzon, VII STD, Bell Matric Hr.Sec. School, has served as young Special Performer and Mrs. L. Sujatha, Assistant Professor, Department of Computer Application, St. Xavier's College, has served as the Judge. **Technical Quiz Series – 1,** covering the topics C and C++ Programming was conducted on 27.08.2022 by John MCcarthy CSE Quiz Club. Thirty Four students have participated in the quiz. International Literacy Day Special, Book Cover Designing Competition was conducted on **08.09.2022** by Xaverian Association of Computer Science (XACS). Seminar on Remote Sensing and Image Analysis was organized on 23-09-2022 by Xaverian Association of Computer Science (XACS). Prof. Anitha, Assistant Professor, Department of Information Technology, National Engineering College, Kovilpatti served as Resource Person for Aptitude Test Series 1, Current Affairs Test 1, Essay Writing Competition. Singing Competition-Melody was organized by Steve Jobs CSE Fine Arts Forum. Seminar on Cryptography is organized on 27.09.2022 by Xaverian Association of Computer Science (XACS). B. S. Abdul Rahman Cresent Institute of Science and Technology, Chennai served as the Resource Person for the Seminar. Motivational Talk and. Non -Technical Quiz Series-1 was conducted by John MCcarthy CSE Quiz Club. Centenary Year Computer Science Alumni Meet was organized on 02.10.2023. Seminar on Basics of **Programming Language** was organized on **11.10.2022** by Xaverian Association of Computer Science (XACS). Prof. Ms. S. Arul Vallarasi, Assistant Professor, Department of Computer Applications, St. Xavier's College served as resource person. Workshop on Interview Readiness and Career Planning for PG and Third UG Students was organized on 11.10.2022 by Alan Turing CSE Placement Forum. Prof. P. R. Sundara Pandian, Head-Corporate Relations, Xavier Institute of Business Administration has served as Resource Person. An Awareness Talk on POCSO Act was organized on 13.10.2022 by Charles Babbage CSE Men's Forum. Dr. R. Sahayaraj, Assistant Professor, Department of Social Work, St. Xavier's College served as Resource Person. A Special Video Editing Competition Regarding International Day for the Eradication of Poverty was conducted on 17.10.2022 by Xaverian Association of Computer Science (XACS). Fifteen Students from the Department of Computer Science(Shift II) participitated in a State Level Intercollegiate Competition called TEQFEST'22 organized by Department of Computer Applications, Sri Ram Nallamani Yadava College of Arts and

Science, Tenkasi on 17.10.2022 and secured prizes in Tech Connection, Software Marketing and Quiz Competitions. A Guest Lecture on Transaction Concept in DBMS was organized on 28.10.2022 by Alan Turing CSE Placement Forum. Prof. B. Praveen Siromani, Assistant Professor, St. John's College, Palayamkottai was Resource Person. Technical Quiz series - II covering the topic "Data Structure" was conducted on 31.10.2022 by John MCcarthy CSE Quiz Club. Seminar on Convolutional Neural Network was organized on 01.11.2022 by Xaverian Association of Computer Science (XACS). Good Samaritan Forum of Computer Science Department (Shift II) organized a Compassion Event by sponsoring Special Lunch and Evening Snacks & Tea for the children in Blind school, Palayamkottai on 03.11.2022. PG students of Computer Science Department participated in a seminar on "Job Opportunities on Linux Certification" organized by the Placement forum of the College on 12.12.2022. Awareness Talk on Academic Benefits of NPTEL Courses was organized on 19.01.2023 by Xaverian Association of Computer Science (XACS). Alumni meet was organized on 28.01.23. An Orientation Programme on Significance of Certifications on Linux in the Job Market was jointly organized by Dept. of Computer Applications and Dept. of Computer Science on 08.02.2023. Web Designing Competition on Event Management Web Portal was organized on 13.02.2023 by Xaverian Association of Computer Science(XACs).Career Guidance Programme on National Institute of Securities Market(NISM) Certification and Job Opportunities was organized on 05.02.2023. Mr. N. Suresh and Mr. P. Elango Babu ,cofounders of Diksha Academy, Tirunelveli served as resource persons. A State Level Intercollegiate Technical Symposium XPASO'23 was organized on 28.02.23.



Twenty four of our Students from the Department have **participated** in a **National Level Symposium DAWN-23** organized by Francis Xavier Engineering College, Tirunelveli on **03.03.2023** and have won the Overall Trophy. Fourteen students from the department have

participated in an Intercollegiate Symposium-RITTs-2K'23 organized by Rose Mary College, Tirunelveli on 07.03.2023 and won the Overall Trophy. Femina Model Competition and Healthy Diet Competition was organized on 08.03.2023 by Ada Lovelace CSE Women's Forum. Technical Quiz-Series 3 was organized on 14.03.2023 by John MCcarthy CSE Quiz Club. Paper Presentation Competition and Debugging Competition were organized on 15.03.2023 by Xaverian Association of Computer Science (XACS). Software Marketing Competition was organized on 23.03.23 by Xaverian Association of Computer Science (XACS).Glass Painting Training programme was organized by Ada Lovelace CSE Women's Forum on 24.03.2023. Valedictory Function of the Association was organized on 27-03-2023.

TABLE.8.a. PAPERS PUBLISHED IN JOURNALS (2022-2023)

| S. NO | Name of the Teacher | Name of the Department | Title of the Paper | Name of the Journal | Volume No/ Issue No/ Page No / Year | ISSN No. / e- ISSN No. | Cited in Web of Science / Scopus Indexed/UGC Approved / Not Found in UGC-CARE List | National / International | Impact Factor |
|-------|---|---------------------------|---|--|--|---------------------------------|--|-----------------------------|------------------|
| 1 | F. Ludyma Fernando, S. John Peter | Computer Science | Convolutio nal Neural Network for the Recognition and Characteriz ation of Emotions using Double Average Filtering and SELU activation – Valence Cognizance | Turkish Journal of Compute r and Mathema tics Educatio n | Vol.13 /No.03 /195- 203/2022 | e-ISSN 1309-4653 | Scopus | International | |

| 2 | F. Ludyma Fernando, S. John Peter | Computer Science | SUPPORT VECTOR MACHINE WITH RADIAL BASIS FUNCTION FOR FACIAL EMOTION VALENCE RECOGNITI ON | European Journal of Molecula r & Clinical Medicine | Volume 9/ Issue 4/Pages 1960- 1969/2022 | ISSN 2515- 8260 | Scopus | International | |
|---|--|---------------------|---|--|---|------------------------|----------|---------------|--|
| 3 | Sahaya Jeya Sutha,Dr D.S.Mahe ndran,Dr. S.John Peter | Computer Science | An Efficient Content Based Image Retrieval using Block Truncation Coding | Neuro Quantol ogy | 20(8):812- 823 | ISSN 1303 5150 | Scopus | International | |
| 4 | Edward Daniel Christoph er B. and | Computer Science | Effective Performan ce Improvem | Stochast ic Modelin g | Vol. 26 No. 3 (January - June, Special | ISSN: 0972- 3641 | UGC CARE | International | |

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| 5 | Mary Magdalen e Viola W. and Victor S. P | Computer Science | A survey on image processing techniques for motion detection in video surveillanc e system | Internati onal Journal of Multidis ciplinary Researc h, | Vol. 8, Issue 3, March 2022, pp 171-174. | ISSN 2277- 9302. | UGC CARE | International | 8.205 |
| 6 | A. Dhana Praveena | Computer Science | An Efficient Adaboost | Internati onal Journal | Vol. 7 No. 5 May, | ISSN: 0974- | Scopus and UGC-CARE | International | 2.1 |

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TABLE.8.b. – PAPERS PUBLISHED IN CONFERENCE / SEMINAR PROCEEDINGS (2022-2023)

| S. No | Name of Teacher | Department | Title of the Paper | Title of the Proceedings | National / International | (Place, Publisher, Year, Page No.) | ISSN / ISBN No. |
|-------|--------------------|---------------------|--|--|-----------------------------|--|-----------------------------------|
| 1 | Dr.V.Narayani | Computer Science | Classification of Mangosteen Fruit Disease Detection System based on existing Convolutional Neural Network | Proceedings of 2nd International conference in Innovative Computational Intelligence | International | Vol.2,2022, 546-554 | |
| 2 | Dr.V.Narayani | Computer Science | Analyzation of Various Optimizers Using Convolutional Neural Network for Mangosteen Fruit Disease Detection System | Proceedings of National Conference on Contemporary Research and Computer Intelligence (Nccraci-2022) | National | Nagercoil, B-DIGEST Publications, 2022, 279- 283 | ISBN: 978-93 84734- 62-6 |