

MONTHLY INSIGHTS

FEBRUARY 2023

DEPARTMENT OF
INFORMATION TECHNOLOGY



Vision of Department of Information Technology

To nurture the joy of excellence in a world of Information Technology.

Mission of Department of Information Technology

- M1: To develop the critical thinking ability of students by promoting integrative learning.
- M2: To bridge the gap between industry and institute by giving students exposure to industrial demands and current trends.
- M3: To promote excellence in learning and research, and to be responsible when dealing with social concerns.
- M4: To encourage students to pursue higher studies and make them aware of various career opportunities.



ARTICLES

Cybersecurity trends for 2023 and what to expect

The rapid proliferation of new attack surfaces means more opportunities for threat actors than ever before, and this will only continue as new technologies are introduced, according to Vulcan Cyber's Cyber Risk in 2022: A 360° View report.

The report, developed by the Vulcan Cyber in-house research team, Voyager18, highlights the biggest developments and underlying narratives to cyber risk in 2022 and suggests ways to improve and maintain security posture as we enter 2023. According to the report, organizations need to be aware of the following seven trends in 2023:

1. More attacks in the cloud

Security in the cloud remains immature, with default cloud services often providing inadequate essential security functions. Threat actors are keenly aware of this, and security teams must keep up with their organizations' appetite for cloud adoption.

2. Mobile security attack surface

With around two-thirds of the world's population using smart devices as of 2021, it is no surprise that mobile is fast emerging as a major target for threat actors. Attackers leverage easy opportunities in e-commerce, banking and online booking applications. With mobile devices not going anywhere soon, this attack surface will only continue to grow.

3. Threat actors to IOT

Expect to see more sophisticated and targeted attacks on Internet of Things (IOT) devices and a greater range of malicious actors targeting this technology in their attacks.



4. Healthcare sector at risk

The healthcare sector is increasingly vulnerable with more patient data being stored online and in the cloud, and the residual impact of the COVID-19 pandemic on healthcare services.

5. AI in security efforts

A welcome development for 2023 will be the increased implementation of advanced machine learning and other artificial intelligence (AI) techniques in identifying and responding to threats.

6. Users as an attack surface

An organization's user base will remain a primary target, with threat actors leveraging phishing, social engineering, and other techniques to try to compromise the organization's employees and their customers.

7. Diversified cyber risk requires a better solution

With the avenues of attack growing in number, IT security teams cannot rely on outdated methods to stay secure. The report explores a number of ways organizations can meet the increased demands of the cyber risk landscape, including:

- Making employees part of the company's security defense
- Keep patches up to date
- Restrict unnecessary access
- Implement multi-factor authentication
- Follow industry best practices



SE IT



Djed stable coin

“Djed is an algorithmic stablecoin protocol that behaves like an autonomous bank that buys and sells stablecoins for a price in a range that is pegged to a target price.”



As stated in a COTI blog post, Djed has now become the fourth largest project on the Cardano network. The Cardano DJED builder says the protocol has been stable since its successful launch on Jan. 31. Djed has introduced a unique solution to ensure their stablecoin’s price stability: a smart contract that maintains a reserve of SHEN, Djed’s reserve currency. This reserve is 400 to 800% collateralized, so if ADA plummets, Djed holders will be made whole with SHEN.

DJED will be the first to incorporate formal verification to ensure price stabilization, making it useful for decentralized finance (DeFi).

Sachin Vishwakarma



FE IT



ACADEMICS

Guest lecture on Industrial Applications of Python

A guest lecture was conducted for the students of SE IT by Prof. Jaychand Upadhyay on the topic of Industrial Applications of Python and Advanced Dev-Ops on 15th February 2023 in which the guest speaker was none other than an alumni of XIE.

Industrial Applications of Python

Shivang Sachdev - Senior DevOps Engineer at Upstox

The speaker, Mr. Shivang Sachdev is an alumni of 2014-2018 batch of XIE who has worked as a Software Engineer Dev-Ops at Zycus and is currently working as a SDE - II Dev-Ops Engineer at Upstox.

The session was very informative and the students learnt the advantages, disadvantages and the actual applications of Python programming language and Dev-Ops in the industry and he discussed about the approach students need to apply to be industry ready. The session ended with a very informative QnA session.



Industry applications of Python

- Automation of Manual tasks
- Web Development
- Data Science and Data Visualization
- Gaming industry
- Machine learning / AI
- Education Programs and Training Programs
- Linux, Ansible
- Text Processing - Natural Language Processing



PLACEMENTS

In this month, many different companies visited the campus of XIE to recruit students from various different branches for a variety of positions in the company. Some of the students from IT department who got placed in different companies in this month were:

1. Shubham Palav got placed in NeoSOFT Technologies with a package of 3.6 LPA
2. Siddharth Yennuwar got placed in BNP Paribas with a package of 6 LPA
3. Rahul Nadar got placed in eClinical Works with a package of 3 LPA
4. Dhruyash Mahale got placed in RSM Astute Consulting with a package of 3.5 LPA
5. Nihar Vira got placed in Media.net with a package of 8 LPA

XIE at the CSR Day Congress by 'World Sustainability Foundation' at Taj Lands End

Director, Fr. John Rose was presented the 'Innovative Leader Award' by the 'World Sustainability Foundation' on the occasion of the World CSR Day, on 17th February 2023 at Taj Lands End. Prof. Vijay Kapure, HoD of Applied Sciences and Humanities and Mr. Naveen Kukreja, TPO accepted the award on his behalf



XIE's collaboration with Pluto motors

XIE has collaborated with Pluto Motors; an electric vehicle company that promotes clean energy, to make their electric car completely solar-powered. A model car was brought on campus, which Director; Fr. Dr. John Rose and Principal; Dr. Y.D. Venkatesh took for a test drive. Lots of awe and acclamation has been generated for this project that XIE is set to work on.



Achievements by our Faculty

Prof. Meena Ugale worked as reviewer for International Conference on Communication Systems, Computing and IT Applications 2023 for Smart Cities.



Ms. Stella J attended workshop on 'Cyber Security" organized by St. Joseph's Institute of Information Technology from 23rd Aug to 25th Jan 2023



Workshop on Ethical Hacking and Cyber-Security

The Computer Society of Xavierites (CSX) organized a workshop on 'Ethical Hacking and Cyber Security' on 10th February 2023.

Mr. Sean Pereira from BE-COMPS was the resource person. He gave a detailed explanation of the concepts related to the field and even demonstrated how hacking can take place

The workshop was created and hosted by Amisha Narvekar and Rickin Sibi under the banner of the CSX with the guidance of Prof. Jyotsna More and Prof. Teena Varma.





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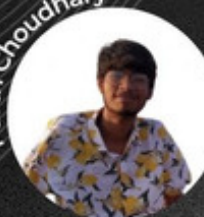
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