

BITS 'N' BYTES



Vol.13 Issue 2

Editorial

This edition of **Bits 'N' Bytes** encapsulates a vibrant array of department activities, showcasing our commitment to fostering innovation and knowledge. From launching the "Igniting Innovation" series aimed at practical skill development, hosting insightful talks on cybersecurity, to engaging in interdisciplinary curriculum development under the NEP 2020, our community thrives on collaboration and excellence. The successful conduct of "Geekhunt" further exemplifies our dedication to making technology accessible to all students, highlighting the universal language of coding.

As we reflect on these achievements, it's clear that our collective efforts are not just about advancing technical skills but nurturing a culture of continuous learning and adaptability. These initiatives prepare our students for the evolving tech landscape, emphasizing the importance of both innovation and inclusivity in shaping the future of computer science education.

-VYOM DESAI
S.Y Bsc



CONTENT

Editorial

Page
1

Department Activities

Page
2-5

Student's Corner

Page
6-7

Articles

Page
8-11

Faculty Corner

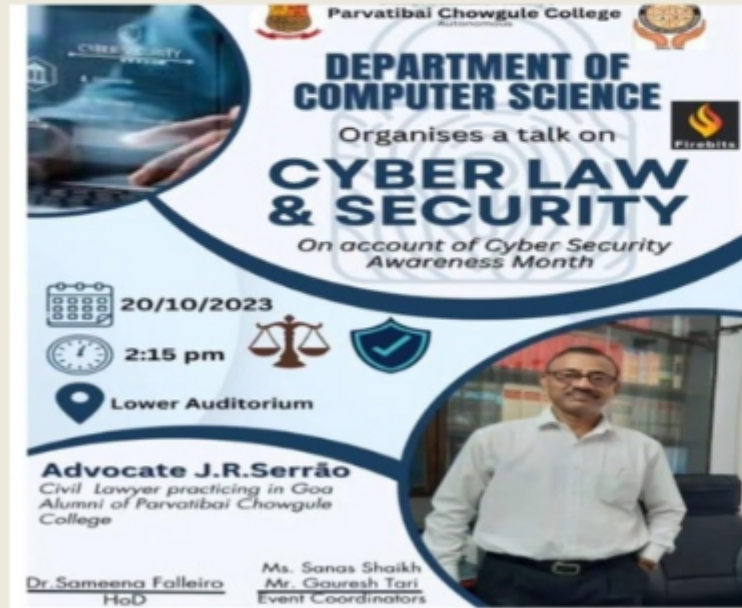
Page
12-13

DEPARTMENT ACTIVITIES

An innovative Student led Tech Series named **“Igniting Innovation”** was launched this under the FireBits Club of the Department to motivate students to conduct workshops, teach, and introduce practical skills, new techniques, or ideas to students. The First Event in this category was a Talk on **“Introduction to game development using unity”** and was held on 11th August. 2023 given by the current M.Sc-IT students of the Department: **Mr.Joshua Kurt Pereira, Mr. Rohan Gaude and Mr. Shubham Vishwakarma**



The Department of Computer Science organized a talk on “Cyber Law & Security” on 20 th October 2023 for the students of the department and the college. The session was delivered by Adv. J.R.Serrão, a practicing advocate in Civil and criminal law in South Goa including high Court of Bombay at Goa.



Training, Internship & Placement (TIP) Cell of Goa State Higher Education Council (GSHEC) and Directorate of Higher Education (DHE) in partnership with IBM and its implementation partner REACHA organized a talk on “Cyber Security” on 18th October, 2023 in an online mode for students & faculty. 18 students and 4 Faculty from the Department attended this session. The session was delivered by Mr. Ritesh Mittal (Solution Architect) and Ms. Nidhi Bansal (Senior Management Consultant) of the IBM India operations to enhance participant’s knowledge and practical skills in the field of cyber security.



The Department of Computer Science organized Board of Studies (BoS) on 11th October, 2023, to seek approval for the UG syllabus for B.Sc. in Computer Science, MSc IT Programme, BVoc in Software Development and also to approve the Multidisciplinary, Skill Enhancement, Vocational Education & Training Ability Enhancement (Modern Indian Language) Syllabus under the NEP 2020.

The Department of Computer Science organized Academic Audit for the AY 2022-2023 on 11th October, 2023.



The Department of Computer Science Firebits Club organized Geekhunt – a Programming Contest for Non-Computer Science students 2.0 on 13th October, 2023.

Chowgule Education Society's
Parvatibai Chowgule College of Arts and Science
Autonomous

Department of Computer Science

Firebits
PRESENTS

GEEK HUNT 2.0

"MCQ quiz and coding on Python Programming"

- » "For all non major/minor-CS students"
- » "13th October 2023, 2.30 pm"
- » "F-block, Lab 1"
- » "The google form will be open till 10am on friday for registration"

Dr.Sameena Falleiro
HoD

Dr.Shaila Ghanti
Club In-Charge



STUDENT'S CORNER

Student Achievements:

Mr.Vyom Desai a student of the S.Y.B.Sc in Computer Science has developed a s/w for Mumbai Hackathon on Use of LLMs to condense and summarise PDFs worth of scholarly papers. He has also developed a software solution that can have conversation with a PDF(like a document). He worked on this from 1st to 5th August, 2023.



Participation:

Dr.(Ms).Sameena Falleiro, TLETC Convenor of the College along with **Dr.Shaila Ghanti**, Associate Professor in Computer Science accompanied by three students of the Department from the B.Sc in Computer Science programme **Mr.Aditya Lobo**, **Mr.Isaac Azavedo** and **Mr.Aryan Swami** attended a Seminar cum Hands-on **Demonstration on Virtual Reality and Augmented Reality** organised by GSHEC and DHE in Panjim on 31st August at 2.00pm.



ARTICLES

Contributions of Indians in Technology



The world of computer programming has witnessed remarkable contributions from Indians, whether it's **Sundar Pichai, the CEO of Google and Alphabet (GOOGL)**, or **Satya Nadella, the Chairman and CEO of Microsoft (MSFT)**. Technology has always been ingrained in Indian culture. In this article, we would like to introduce you to three programming languages that were invented by our great Indian computer scientists.

Julia - Co-created by Viral B Shah:

Viral B Shah, a computer scientist born and raised in India, is famously known as the co-creator of the Julia programming language. Julia has gained popularity among data science professionals in recent years. Launched in 2012, Julia has gradually risen in prominence in the technological world. It is now considered one of the most viable alternatives to well-established languages like Python and MATLAB. Julia is also well-suited for computational science and high-performance numerical analysis, tasks that were once highly demanding.

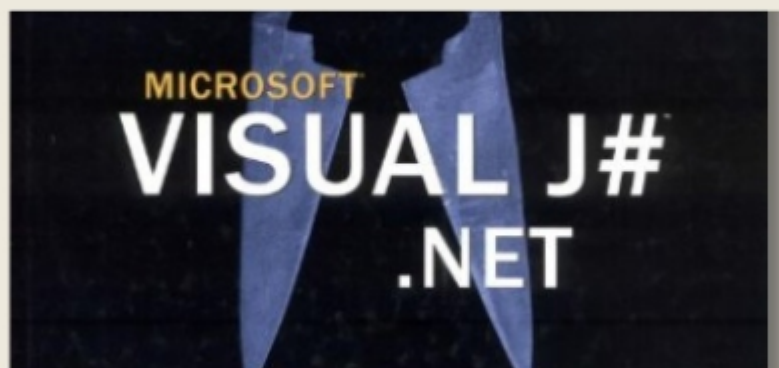


**Kojo - Developed by Lalit Pant:**

Lalit Pant, a computer scientist and educator, developed Kojo with the vision of making programming more approachable, interactive, and enjoyable. First introduced in 2010, Kojo is an open-source programming language and an integrated development environment. The language offers several features that facilitate computer-based learning, including activities such as playing, exploring, and developing cognitive abilities like mental skills, interactive math, graphics, art, music, science, animation, games, and electronics.

Visual J# - Developed at Microsoft India Development Center(Hyderabad)

Pronounced as "Visual Jay-Sharp," Visual J# was introduced by a team of Indian developers working at the Hyderabad-based Microsoft India Development Centre at HITEC. Visual J# was designed as an extension of the Visual Studio suite of programming tools. Its primary objective was to bridge the gap between Java and the Microsoft platform. At the time, Java was a widely adopted programming language, and Microsoft aimed to provide Java developers with a seamless transition to .NET technologies. While Visual J# is no longer actively developed or supported, it is still known for its interoperability, ease of use, and its role in bridging the gap between different technologies.



-SERENA ISABEL SERRAO
F.Y Bsc



Exploring Diverse IT Careers in Computer Science

Software Development:

Software development is one of the most sought-after careers in Computer Science. Software developers create applications and systems, from mobile apps to complex enterprise software. This field includes specializations like front-end, back-end, and full-stack development, each requiring unique skills. Software developers are in high demand in an ever-evolving industry, offering growth and innovation opportunities.

Data Science and Analytics:

In the era of big data, data scientists and analysts play a critical role. They collect, process, and analyze vast data sets to derive insights and support data-driven decisions. Data scientists use programming, mathematics, and statistics to solve complex problems, aiding organizations in optimizing operations and uncovering data patterns. The demand for skilled data professionals is rising, making this an attractive career option.

Cybersecurity:

In an increasingly digital world, cybersecurity is a top priority. Cybersecurity professionals protect systems, networks, and data from threats and attacks. Roles include ethical hackers, security analysts, and security architects. The need for cybersecurity experts remains constant as threats evolve, offering a stable and rewarding career.

Artificial Intelligence and Machine Learning:

Artificial Intelligence (AI) and Machine Learning (ML) drive technological innovation. Professionals in AI and ML develop algorithms and models for machines to make intelligent decisions. These technologies apply to various industries, such as healthcare and finance, with high demand and ongoing innovation.

IT Management and Project Management:

For those interested in technology and leadership, IT management and project management are viable paths. IT managers align technology with organizational goals, while project managers plan and execute projects. These roles require strong communication, leadership, and problem-solving skills, along with technical knowledge.

The field of Computer Science offers diverse IT career opportunities for various interests and skill sets. Whether your passion lies in software development, data analysis, cybersecurity, or emerging tech like AI and ML, a path awaits you. As technology continues to integrate into our lives, IT careers in Computer Science remain relevant and high in demand. It's an exciting time to explore the world of IT, where innovation and endless possibilities await those ready to learn and explore.

-TANVI VERLECAR
F.Y Bsc



FACULTY CORNER

Faculty Achievements:

Dr.(Ms).Sameena Falleiro was the resource person at the 118th Faculty Induction Programme conducted by UGC-HRDC Goa University for the newly recruited faculty at College / University level which was conducted Online. She delivered two sessions on "**MOOCS in Higher Education**" on 9th August, 2023.



Dr Shaila Ghanti was Invited as an **Expert for Pedagogical Observation** as a part of Academic Quality Cell at Vidya Vikas Academy, Margao on 22nd August 2023.

Faculty Participation:



Ms.Suchitra Bhat, Associate Professor Department of Computer Science attended a talk on "**India's startup Initiatives , policies and Funding Opportunities**" on 31 August 2023.Organised by BITS Goa Innovation Incubation & Entrepreneurship Society ,BITS BIRAC, BioNEST Goa.

Amogh Santosh Pai Raiturkar, faculty of M.Sc. IT attended a one day workshop on the topic "**Hyper Automation - Unlock the potential with EIQ Platform**" on 6th October 2023 at **Don Bosco College of Engineering, Fatorda Goa**.

Dr.Sameena Falleiro, Ms.Suchitra Bhat and **Ms.Dikshita Aroskar** participated in a Two-Day Workshop on Digital Education: Conceptualisation, **Design & Development of MOOCs** on 12th and 13th October, 2023 Organised by the Directorate of Higher Education (DHE) and Goa State Higher Education Council in collaboration with Consortium for Educational Communication (CEC), New Delhi.



EDITORIAL TEAM

FACULTY

Mrs. Sanas Shaikh
Assistant Professor

Dr. (Ms.) Sameena Falleiro
HOD, Associate Professor

STUDENTS

Aakansha Naik, S.Y Bsc
Vyom Desai, S.Y Bsc