



# NEWS LETTER 2023

DEPARTMENT

OF

COMPUTER APPLICATIONS

**Department of Computer Applications** |

### Highlights of the Department

1) Earn while you learn

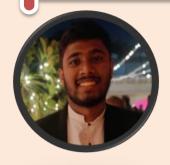
Approx. 8 students from final year students having more than 70% marks got an internship opportunity to co-op for a job with a salary of Rs.15000 to Rs.30000 p.m.

- 2) Vinay Sati, student of final year got an internship in IIT Jammu in the field of web development.
- 3) The Prelims round of the Anugoonj 2k24 started with the enthusiasm and it brought good news for the BCA Department. Prerna a student of 2nd year has made college proud by winning 1 st prize in the light vocal solo inzone 5 of Anugoonj. Where more than 20 college and 28 students participated aswe know Anugoonj 2k24 featured an array of competition, performances andworkshops that celebrated the diversity of talent among college students. Numerous colleges and university from across the region participated in the Prelims. The selection process was rigorous and each event had its panel of judges. This was the greatest opportunity for a student to highlight his/her collegeand prerna did it very well.



"The ultimate promise of **Technology** is to make us Master of a world that we command by the push of a button."

## "The Evolution of Computer Science: Navigating the Digital Frontier"



JESTINE DANIEL, 3<sup>rd</sup> Year E.No- 01319202021 In an age of rapid technological advancement, the Department of Computer Science at LLDIMS is a beacon for those eager to explore the diverse worlds of computer science. Computer Application is more than a subject. It is a journey towards the limitlessness of technology and innovation. As prospective students, we are excited to start this journey with our curiosity and passion for problem solving. In this article, we will take a closer look at the major developments in computer science and their effects on our lives.

### **♣** Foundations of Computer Application

Computer Application, often called "computational Application," is the study of algorithms, data structures, programming languages, and principles that govern the design of software and hardware systems. . Its roots can be traced back to the work of pioneers such as Alan Turing, John von Neumann, and Grace Hopper. These visionaries laid the foundations of the digital world we know today.

### From the big room to pocket devices

The history of computer Application is a story of exponential growth and shrinking sizes. In the mid-20th century, the first computers were huge machines that took up entire rooms. These giants could be calculated at a speed unimaginable at the time. However, their size and cost limit their accessibility. Fast forward to today and we have more calculators in our pockets than we ever had in big room machines. Smartphones, tablets and laptops have become an integral part of our daily lives. The transition from mainframes to portable devices represented incredible advances in computer Application.

### **Artificial Intelligence:**

The New Frontier One of the most exciting pioneers in computer Application is artificial intelligence (AI). Artificial intelligence aims to create machines that can simulate human intelligence, thus leading to the development of many fields. We see the use of artificial intelligence in self-driving cars, virtual assistants like Siri and Alexa, and recommendations to help us find content we are interested in. LLDIMS Department of Computer Applications has a unique opportunity to explore this technology and contribute to its development.

### **4** Conclusion

Computer Application is more than just learning; It is a dynamic and ever-changing environment that makes up the world we live in. LLDIMS Department of Computing is your gateway to exploring this fascinating world, from the fundamentals of computing to decision-making, intelligence and cybersecurity. As students with a passion for technology and innovation, we are excited to join this community and make our mark on the beautiful landscape of computer Application. With the knowledge and skills we acquire here, we will be ready to enter the digital frontier and contribute to a future where technology continues to make our lives better.

# Syllabus to be covered

Ist Year	2nd Year	3 <sup>rd</sup> Year
Subject:- C ProgrammingUNIT III: STRUCTURE  1) Structures, unions, Enumeration, passing structure to functions, arrays and structures, typeof difference between structure and union, self-referential structure, bit fields. 2) File handling [text (ASCII), binary] 3) File input output operations, file access modes, file pointers, file Positioning functions (fseek, ftell, rewind etc.)	Subject:- OOP's Using C++ UNIT III: Inheritance and Polymorphism  1) Types of inheritance, derivation — public, private & protected, ambiguity resolution (function overriding), aggregation, composition v/s classification, virtual base class, constructor and destructor in derived classes.  2) Types of polymorphism, early v/s late binding, Virtual Functions: Need for virtual functions, pointer to derived class objects, pure virtual functions, abstract classes.	Subject-CLOUD  COMPUTINGUNIT 3  Prinicples of parallel and distributed computing, elements of parallel comouting, Hardware approach of parallel processing
Subject:-Fundamentals of Computer ITUnit- I Definition & Characteristics of computer, Generation of computer, Classification of computer, Block diagram of computer, Memory	Subject:- Python Unit-III Concept of Functions: Functions: Defining Values, Formal vs. Actual Arguments, Scope and Lifetime, Default Arguments, Recursion. Modules: importing Modules, Math and Random Module, creating your own Modules	Subject:-Computer Graphics — UNIT III Cohen Sutherland Algorithm, window to view port transformation, 2D, 3D, Parametric cubic curves
Subject:-Discrete mathematics — UNIT III POSETS, Latices, Combinatorics RecurrenceRelation	UNIT III: NETWORK LAYER  1) Internetworking & Devices: Repeaters, Hubs, Bridges, Switches, Router, Gateway, Modems  2) Addressing: IP addressing, subnetting  3) Routing: Routing Methods (Static and dynamic routing, Distributed routing, Hierarchical Routing)  4) Distance Vector Protocol, Link State protocol. Unicast Routing Protocols: RIP, OSPF, BGP; Other Protocols: ARP, IP, ICMP, IPV6.	Subject: Machine learning with Python: UNIT III: Support vector machine, Random forest algorithm, Gradient Descent, Regularisation
Subject- Web TechnologyUNIT-III Cascading Style Sheet: Types of Style Sheets — Internal, inline and External style sheets, creatingstyles, link tag, CSS Properties, CSS Styling, Style Selector- Id, class name and Pseudo Class. BootStrap Basics	Subject:- Computer Organization & Architecture Unit3  Register Transfer & Microoperation, Logical Micro operation, Arithmetic Microoperation, Instruction codes, Comouter Register, Instruction cycle,	Subject:- operating system  Memory Management: Background, Logical versus Physical Address space, swapping, Contiguous allocation, Segmentation, Paging Virtual Memory: Demand Paging, Performance of Demand Paging, Page Replacement, Pagereplacement Algorithms, Allocation of Frames, Thrashing Deadlocks
Subject:- Bridge course in Mathematics — UNIT III Logarithmic Differential, Second order derivatives, Inverse trigonometric functions	Subject:- Asp.net - Advanced control programming, Tracking user sessions, web servers controls, Error handling	Subject:- BCA 5 th Sem  Summer Training Presentation

# **ACTIVITIES**

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		01.11.2023  Quiz Competition (For Ist year )	02.11.2023- SPECIAL LECTURE How to Crack Group Discussions & Personal Interviews		Fresher's Party
	7.11.2023  SPECIAL LECTURE-How to leverage Linked-In for Jobs & CV Writing By Mr. Nishant Jaiswal (For Illrd year)	8.11.2023  Group vise Summer Training Presentation of Final Year Students	9.11.2023  Guest Lecture  "Cloud Computing"	World Science Day (Organized a contest on that day. How today's science is the technology of tomorrow)	11.11.2023
	14.11.2023 Bhaiya Gooj & Children's Day	15.11.2023  Quiz Competition (C/C++)	16.11.2023  Group vise Summer Training Presentation of Final Year Students	17.11.2023 E-Poster Making contest	18.11.2023
19.11.2023 Worlds Men's Day	21.11.2023	22.11.2023  Group vise Summer Training Presentation of Final Year Students	23.11.2023  SPECIAL LECTURE- Profile Building & Opportunities through AIESEC (For Illrd year)	24.11.2023  Workshop on "Python with Machine Learning"	25.11.2023
27.11.2023 Guru Nanak Janti	28.11.2023  Group vise Summer Training Presentation of Final Year Students	29.11.2023  SPECIAL LECTURE- Attitude for Aptitude/ Reasoning Workshop	30.11.2023		



By: Department Of Computer Applications

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