





*We Make You Shine*  
**St. JOSEPH'S INSTITUTE OF TECHNOLOGY**  
(An Autonomous Institution)  
**St. Joseph's Group of Institutions**  
OMR, Chennai - 119

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**ACADEMIC YEAR (2024-2025) ODD SEMESTER**

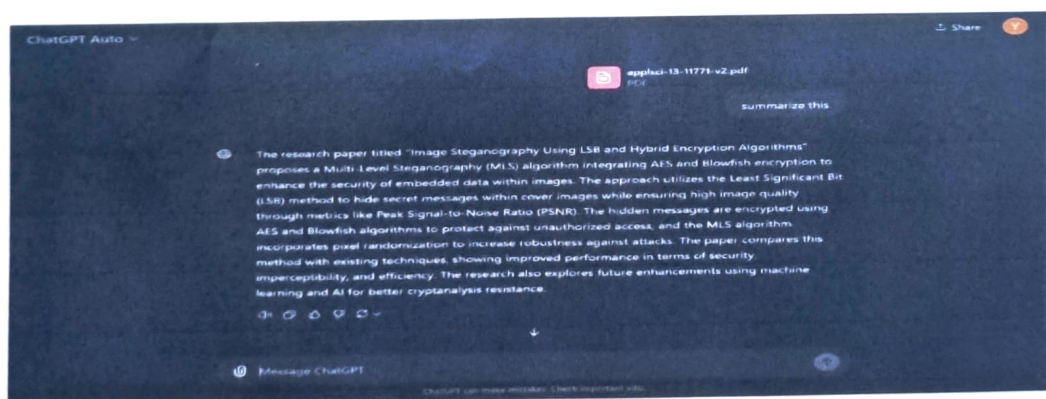
**INNOVATIVE TEACHING**

Name of Pedagogy Used:	<b><u>COLLABORATIVE LEARNING WITH AI TOOLS</u></b>
Branch/Year/Sem/Sec:	<b><u>CSE/IV/VII/ B</u></b>
Subject Code/Subject Name:	<b><u>OHS352 / PROJECT REPORT WRITING</u></b>
Topic:	<b><u>AI TOOLS USED IN REPORT WRITING</u></b>
Date/Period/Timing	<b><u>17.09.2024/4/10.30 AM TO 11.00 AM</u></b>
Objective	AI tools in project report writing is to enhance the efficiency, quality, and accuracy of the report creation process. AI can assist at various stages of writing, helping to improve productivity, reduce errors, and ensure the content is well-structured and meets professional standards.
Description	The tasks are split into batches among the entire class. Each batch have two members. They can apply Various AI Tools (Semantic Scholar, Iris.AI, Connected Papers, Chat GPT, Gemini, etc..) for their own Project Report.
Photos	<div></div>

<b>Students Feedback</b>	<b>312421104098:</b> The AI tools helped me find relevant articles and summarize them, which was incredibly helpful.” <b>312421104120:</b> I was able to create charts and graphs more easily with AI tools, which made presenting my data much clearer.”
Total No. of Students	63
No. of Students Present	58
No: of Students Absent	05
Action Plan for Absentees	Planned to provide the study material to the absentees for self-learning and clarify the doubts thereafter.

#### DOCUMENT PROOF:

**Topic : Enhanced Data Security With AES Encryption And Combined LSB-DCT Steganography**  
**Natural Language Processing (NLP) and Text Summarization:**  
**ChatGPT :**



I used ChatGPT to help me quickly break down and summarize a research paper on image steganography. Instead of going through the whole document myself, I just uploaded the PDF and asked for a summary. ChatGPT pulled out the key points for me, like the main focus on using LSB with AES and Blowfish encryption to secure hidden messages in images.

#### Citation and Reference Management:

##### Mendely:

I used Mendeley to streamline my research process. First, I searched for relevant articles within Mendeley's vast database by entering keywords related to my topic. The tool gave me access to a wide range of peer-reviewed papers, which I could easily add to my personal library with a single click.

Once I had the papers, I used Mendeley to organize them into folders based on different sections of my project. I could also highlight key sections and add notes directly to the PDFs. When writing my paper, I used Mendeley's citation plugin to insert references directly into my Word document, automatically formatting citations and generating a bibliography at the end in the required style (APA, MLA,



etc.). It saved me a lot of time by handling the tedious part of managing references

The screenshot displays a web interface for managing research references. On the left, a sidebar shows filters for 'YEAR' (2016-2022) and 'DOCUMENT TYPE' (Journal, Conference Proceedings, Book Section, Chapter, Report). The main area shows search results for 'Image Steganography'. The top result is 'Image Steganography: A Review of the Recent Advances' by Subramanian, N., & Bourdane, A., published in IEEE Access (2021). Below this, a table lists 'All References' with columns for 'AUTHORS', 'YEAR', and 'TITLE'. The table contains one entry: 'Subramanian, Nandhini B...' from 2021, titled 'Image Steganography: A Review of the Recent Advances'. The interface also includes a search bar, filters, and a 'View' button.

## Question Answering and Knowledge Retrieval: Perplexity AI:

The screenshot shows the Perplexity AI interface. The user's question is 'tell me how DCT works in steganography'. The interface displays 'Sources' and an 'Answer'. The answer explains that DCT (Discrete Cosine Transform) is a popular technique used in image steganography to embed secret data within digital images. It outlines the process: 1. Divide the image into blocks, and 2. Apply DCT to each block. The interface also includes a search bar, filters, and a 'View' button.

When I posed my question, the AI provided a detailed breakdown of the process. It started by explaining how images are divided into blocks and how DCT is applied to those blocks. The assistant also elaborated on the quantization of DCT coefficients and how the secret message is embedded within them.

What I found particularly helpful was the way it outlined the advantages of using DCT in steganography, such as its robustness against image manipulation and its ability to maintain imperceptibility. The explanation was structured and easy to follow, which helped me grasp the concept much better.

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