

Bansilal Ramnath Agarwal Charitable Trust's
Vishwakarma Institute of Technology, Pune-37.
(An Autonomous Institute affiliated to Savitribai Phule Pune University)

Department of Computer Engineering

Innovation by faculty in teaching learning process

Sr. No	Name of Faculty	Name of Course	Initiative	Verifiable indicator
1	Amol A. Bhilare	Data Structures	Course made available through Online platform via VOLP and YouTube.	https://www.youtube.com/channel/UCxx8UuByF1ApO1H4OcAwGOg/videos
2	Pushkar S. Joglekar	Design and Analysis of Algorithms	Blended teaching and learning: Recorded video of some topics were given to students apriori and during the tutorial sessions problem solving based on the topics is carried out	https://drive.google.com/drive/folders/1px4spq2uM-BE3UMM1FSLVN13F-umDqW
3	Swati Jadhav	Software Engineering	Created Subject webpage for having smooth coordination (Like IIT professors does). Provided different courses available freely to excel in this subject + Research paper writing on course projects	https://sites.google.com/view/swatijadhav/software-engineering?authuser=0

Dr. S. R. Shinde
Head of Computer Engg. Department

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Report on “Innovation by faculty in teaching learning process”

Name of faculty: Prof. Amol A. Bhilare

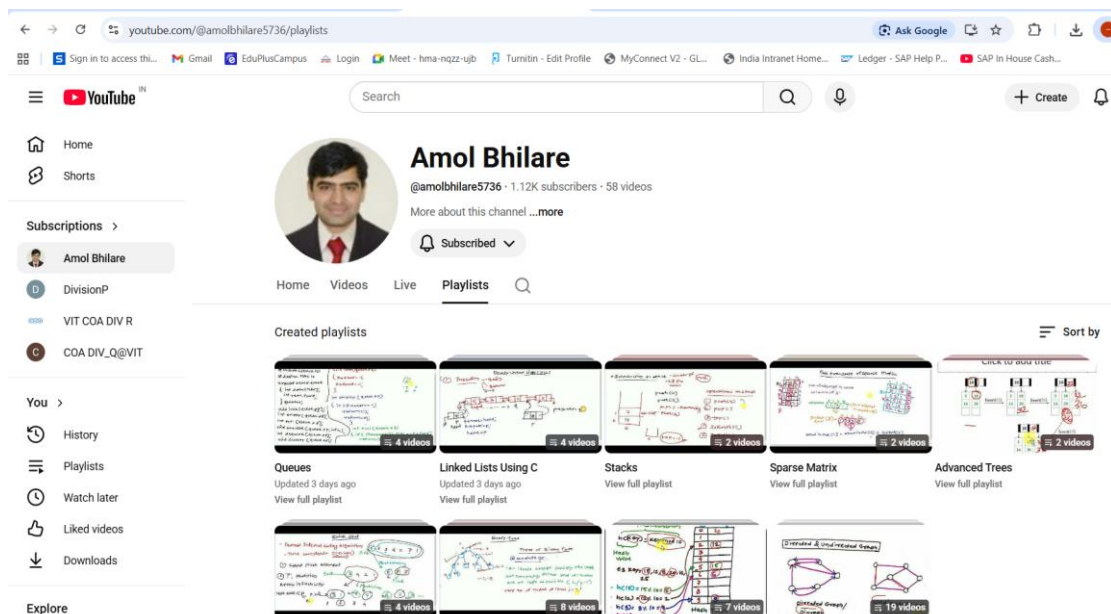
Name of Course: Data Structures

Topics covered:

- Stack
- Queue
- Linked List
- Trees
- Graphs
- Hashing Techniques
- Sorting Algorithms

Photos with caption:

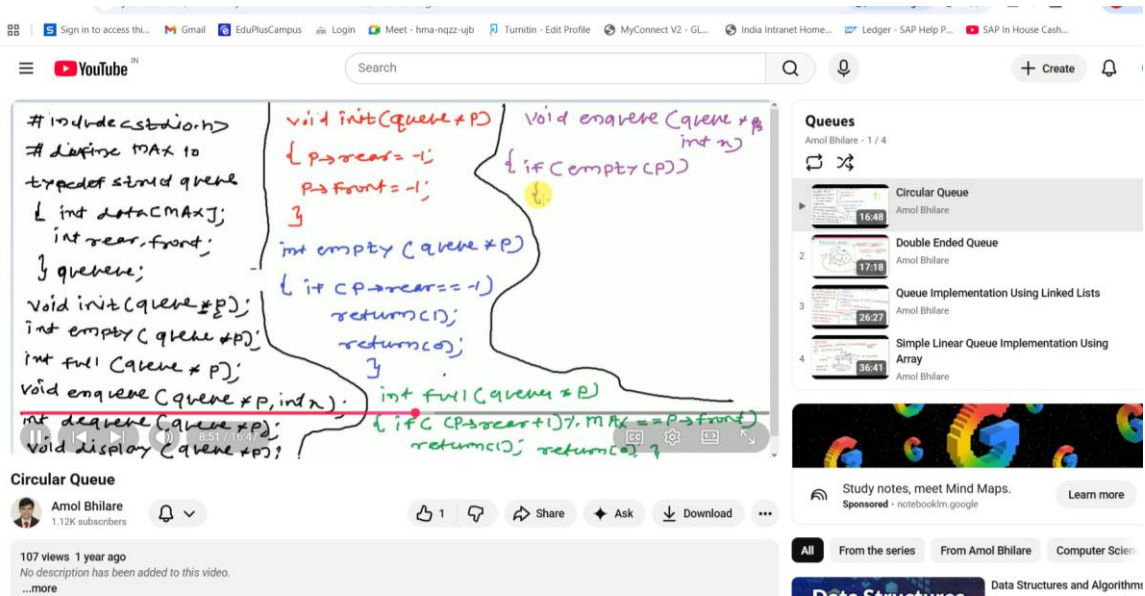
YouTube Channel Home Page



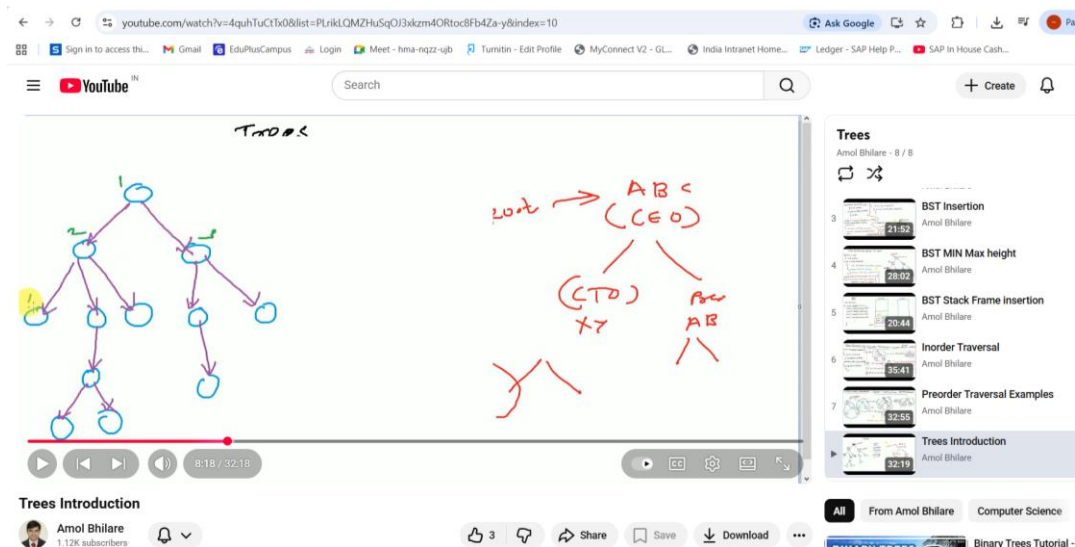
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Topic covered: Linear Queue, Double Ended Queue, Circular Queue and Queue implementation using linked list



Topic covered: Tree Traversal with example, Binary Search Tree with example



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Report on “Innovation by faculty in teaching learning process”

Name of faculty: Prof. Pushkar S. Joglekar

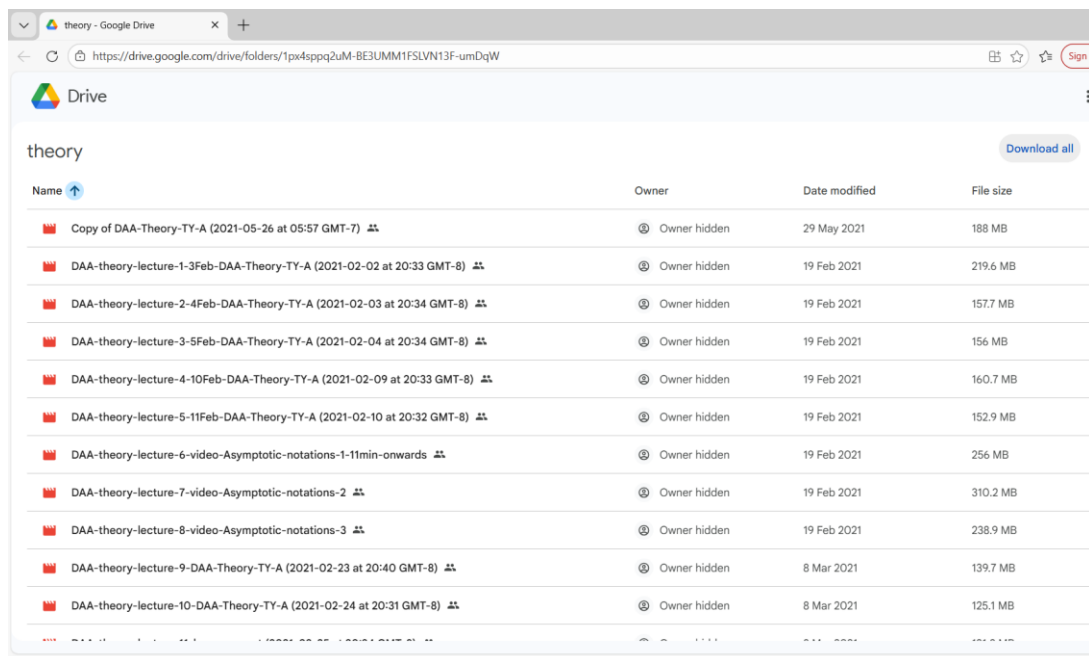
Name of Course: Design and Analysis of Algorithms

Topics covered:

- Asymptotic Notations
- Time and space complexity
- Different algorithm design paradigm like Divide and Conquer, Dynamic Programming, Greedy and backtracking
- P, NP hard, Np Complete Problems
- Randomized Algorithms

Photos with caption:

Contents uploaded on drive



The screenshot shows a Google Drive interface with a folder named 'theory'. The folder contains a list of files, including copies of theory documents and lecture videos. The table below represents the data visible in the screenshot.

Name	Owner	Date modified	File size
Copy of DAA-Theory-TY-A (2021-05-26 at 05:57 GMT-7)	Owner hidden	29 May 2021	188 MB
DAA-theory-lecture-1-3Feb-DAA-Theory-TY-A (2021-02-02 at 20:33 GMT-8)	Owner hidden	19 Feb 2021	219.6 MB
DAA-theory-lecture-2-4Feb-DAA-Theory-TY-A (2021-02-03 at 20:34 GMT-8)	Owner hidden	19 Feb 2021	157.7 MB
DAA-theory-lecture-3-5Feb-DAA-Theory-TY-A (2021-02-04 at 20:34 GMT-8)	Owner hidden	19 Feb 2021	156 MB
DAA-theory-lecture-4-10Feb-DAA-Theory-TY-A (2021-02-09 at 20:33 GMT-8)	Owner hidden	19 Feb 2021	160.7 MB
DAA-theory-lecture-5-11Feb-DAA-Theory-TY-A (2021-02-10 at 20:32 GMT-8)	Owner hidden	19 Feb 2021	152.9 MB
DAA-theory-lecture-6-video-Asymptotic-notations-1-11min-onwards	Owner hidden	19 Feb 2021	256 MB
DAA-theory-lecture-7-video-Asymptotic-notations-2	Owner hidden	19 Feb 2021	310.2 MB
DAA-theory-lecture-8-video-Asymptotic-notations-3	Owner hidden	19 Feb 2021	238.9 MB
DAA-theory-lecture-9-DAA-Theory-TY-A (2021-02-23 at 20:40 GMT-8)	Owner hidden	8 Mar 2021	139.7 MB
DAA-theory-lecture-10-DAA-Theory-TY-A (2021-02-24 at 20:31 GMT-8)	Owner hidden	8 Mar 2021	125.1 MB

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Topic covered: P, Np Complete and NP hard Problems

The screenshot shows a Google Drive window with a handwritten document titled "DAA-theory-lecture-44-Design and Analysis of Algo...". The document discusses the Vertex Cover (VC) problem. It includes three graphs: a square graph with vertices 1, 2, 3, 4 and edges (1,2), (2,3), (3,4), (4,1); a star graph with vertex 1 connected to vertices 2, 3, 4, 5, 6; and a complete graph K4 with vertices 1, 2, 3, 4. Below the graphs, it lists sets S: S = {1, 3} for the square graph, S = {1} for the star graph, and S = {1, 2, 3} for the complete graph. It also mentions "brute force algo" and "VC ∈ NP". A note states "proof certificate → Vertex cover of size ≤ k." The interface includes a sidebar with "New", "Home", "Activity", "Workspaces", "My Drive", "Shared with me", "Recent", "Starred", "Bin", "Trash", and "Storage".

Topic covered: Randomized Algorithm

The screenshot shows a Google Drive window with a handwritten document titled "DAA-theory-lecture-47-DAA-Theory-TY-A (2021-05-19 at 21:34 GMT-7)". The document discusses Randomized Algorithms. It states "assume we have access to random no generator." and lists "Las Vegas - always give correct ans." and "Monte Carlo - Majority". The interface includes a sidebar with "New", "Home", "Activity", "Workspaces", "My Drive", "Shared with me", "Recent", "Starred", "Bin", "Trash", and "Storage".

Prof. Pushkar S. Joglekar
Subject Teacher

Dr. S. R. Shinde
HoD, Computer Engg. Dept.

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Name of faculty: Prof. Swati S. Jadhav

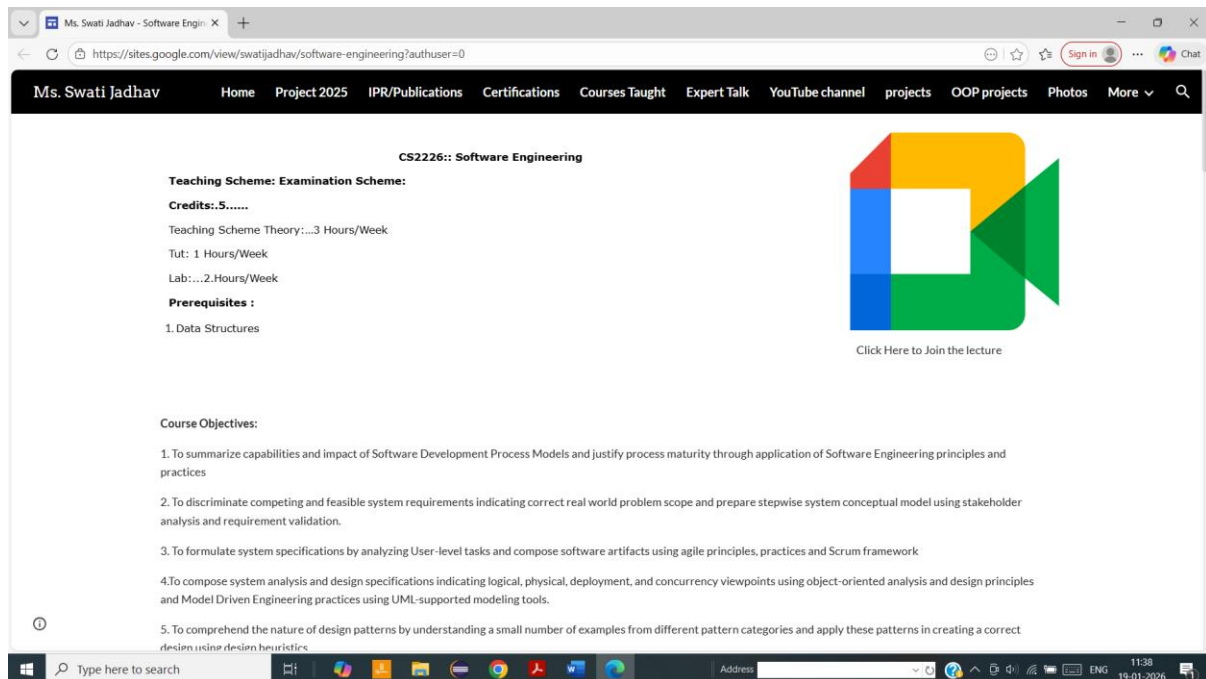
Name of Course: Software Engineering

Topics covered:

- Study material of Software Engineering, Java programming and Python programming Course
- Project ideas along with details
- Links of YouTube Videos

Photos with caption:

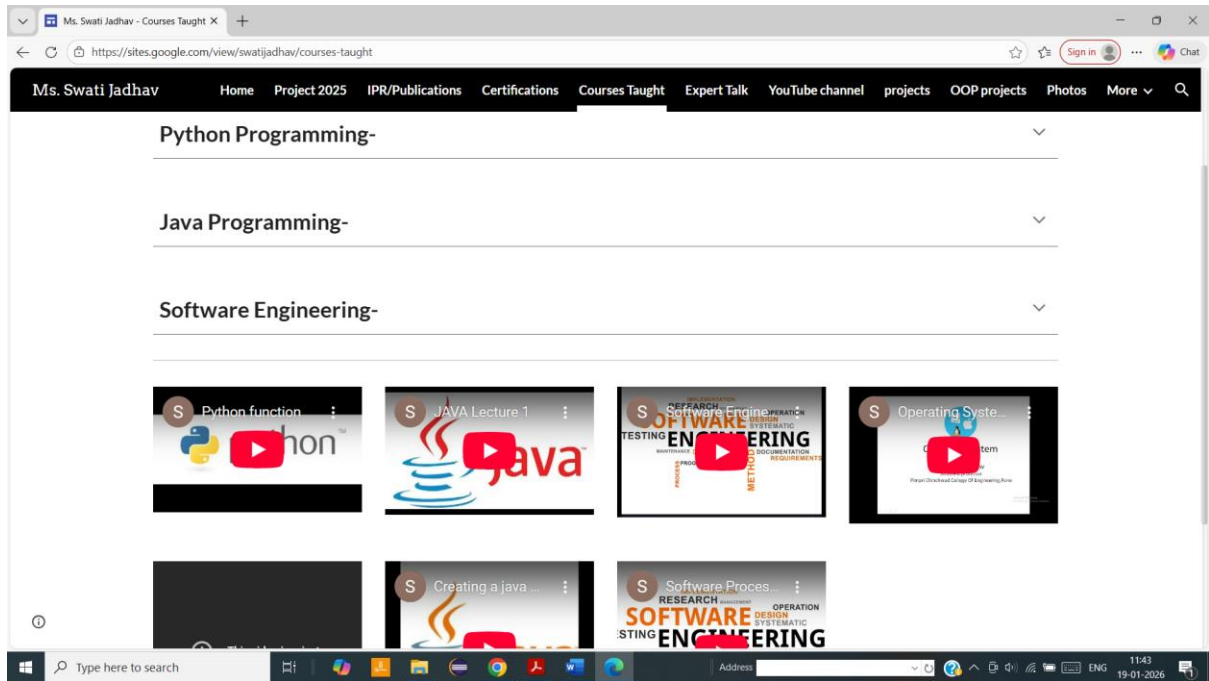
Subject Webpage



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Videos of different courses like Software engineering, java programming and python programming



Prof. Swati Jadhav
Subject Teacher

Dr. S. R. Shinde
HoD, Computer Engg. Dept.