

RWR 4013

Digital Twins for Smart Cities

Dr. Ahmad Mohammadi

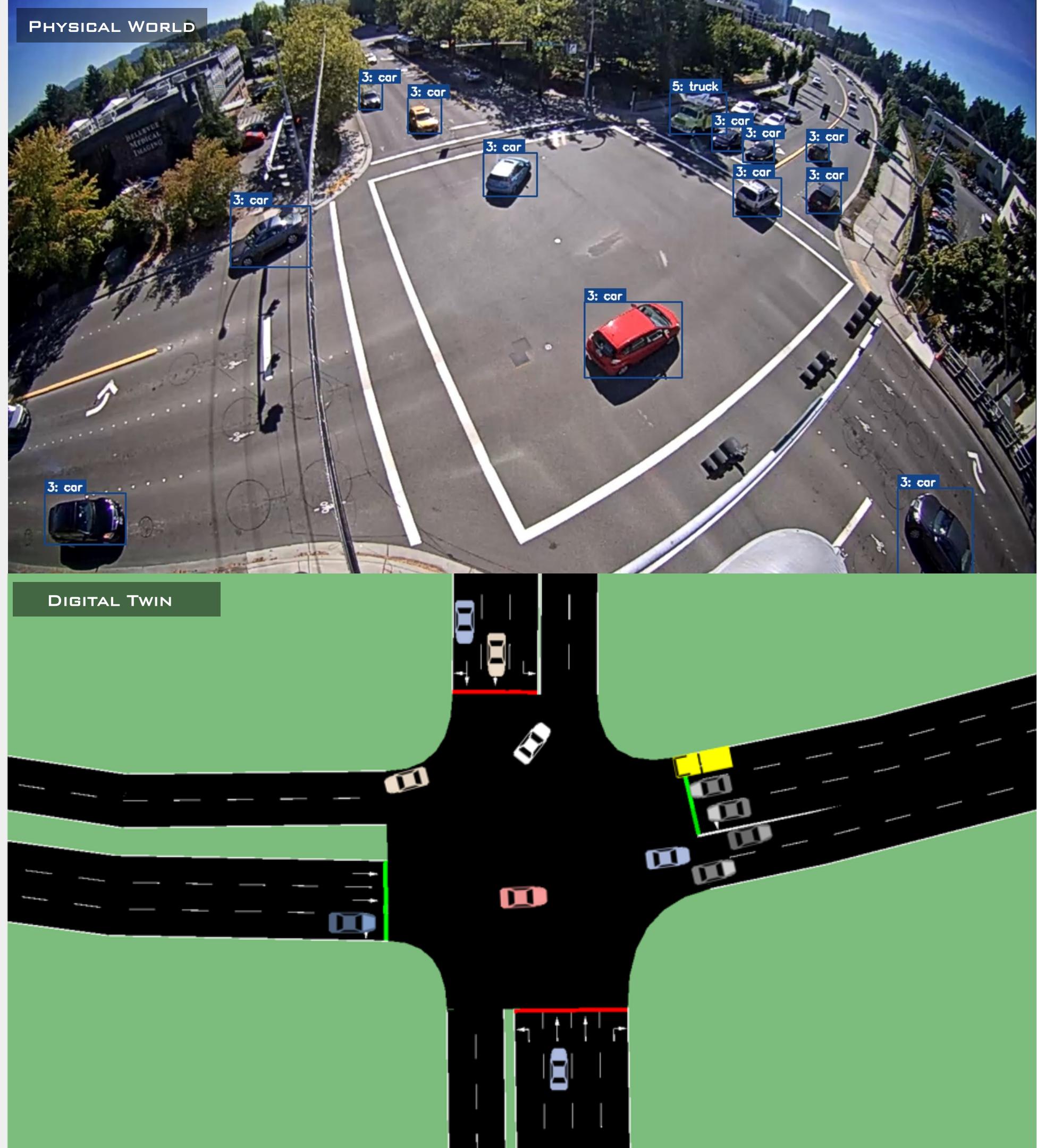
Week 10 | Session 2:
Decision
(Communication & Presentation I)

Fall 2026

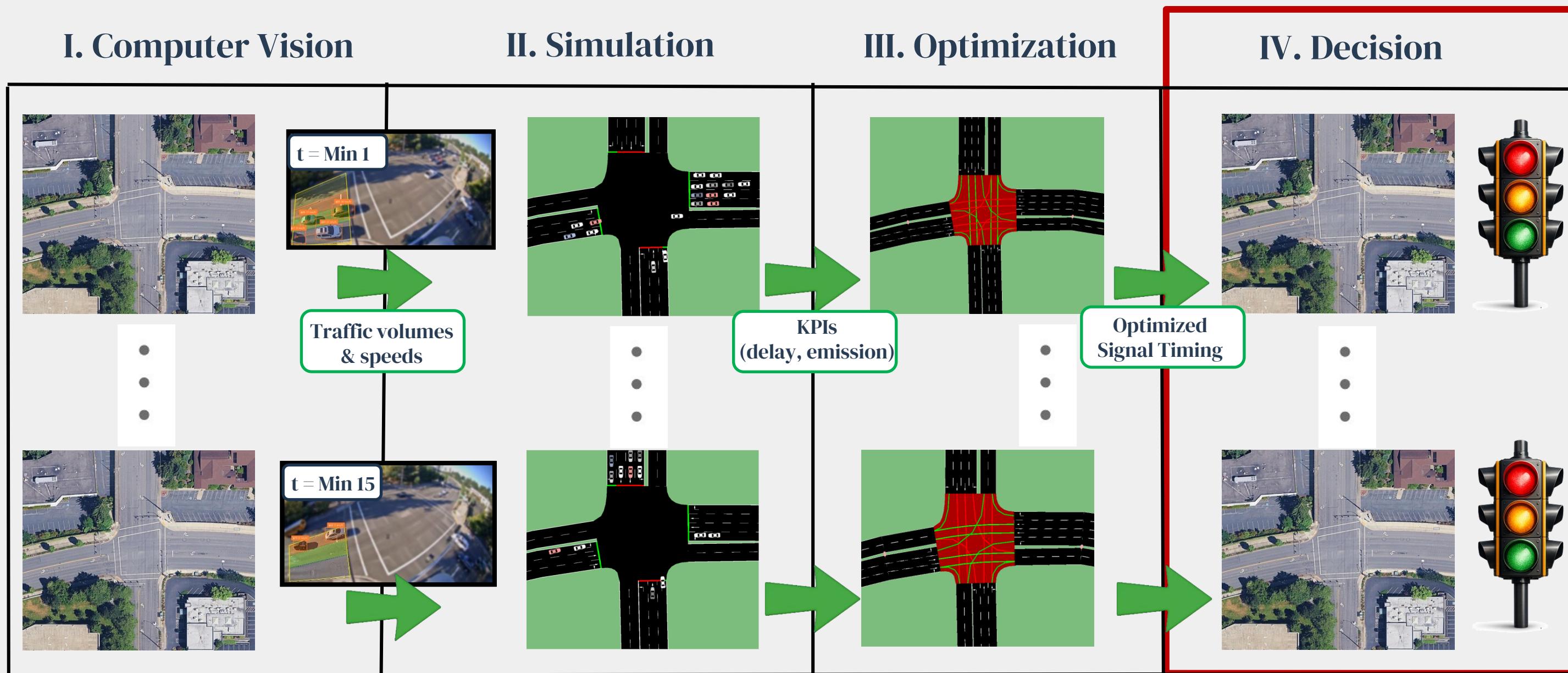
RoadwayVR



roadwayvr.github.io/DigitalTwinsforSmartCities



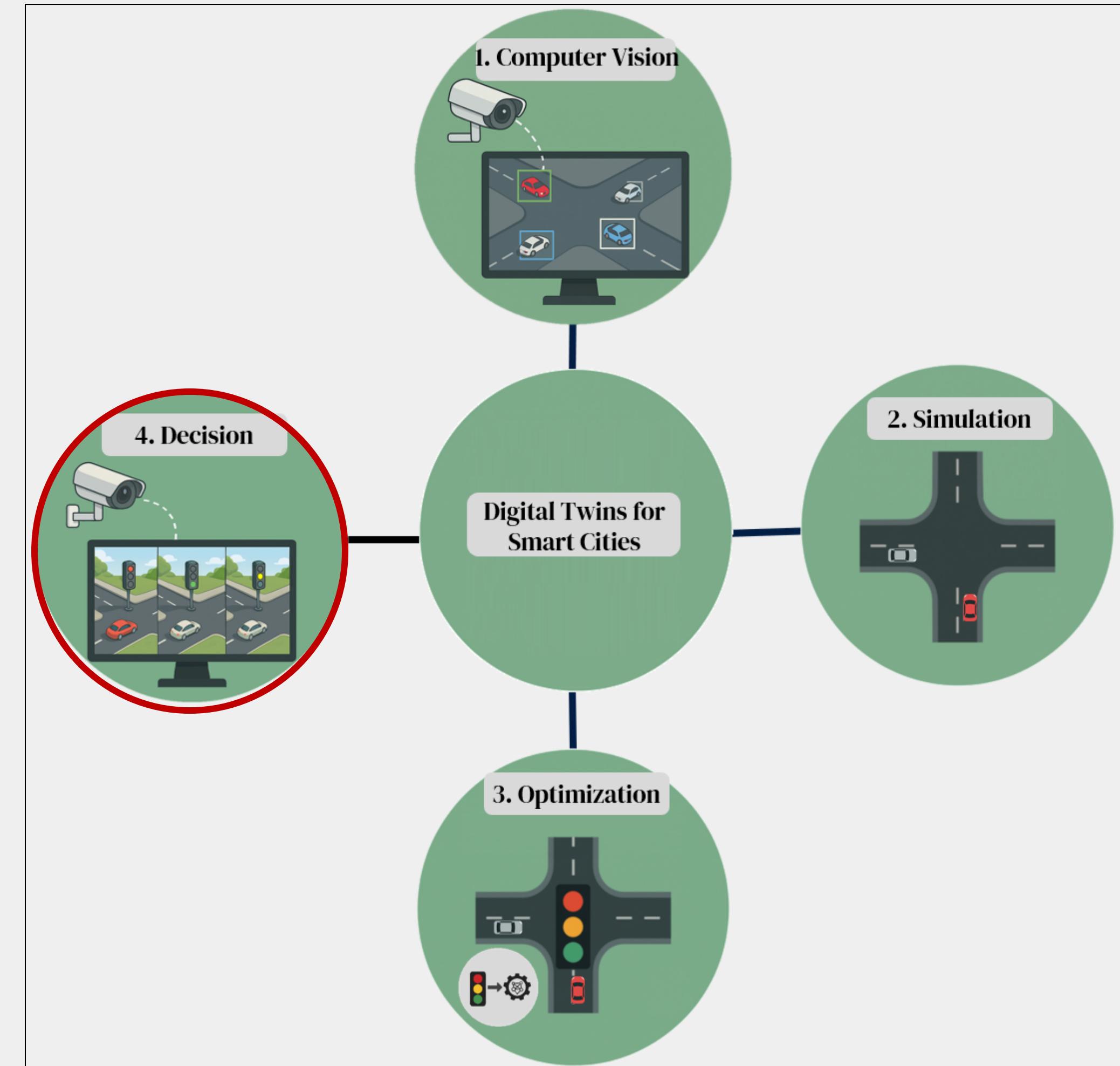
Overview of Course Syllabus in One Shot



Agenda

Create a Professional Presentation

Video Demonstration



Video Demonstration

Required Materials:

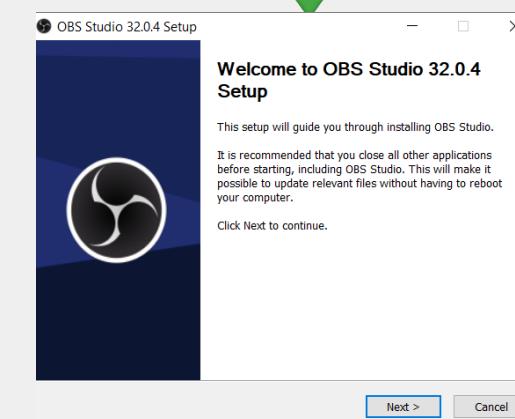
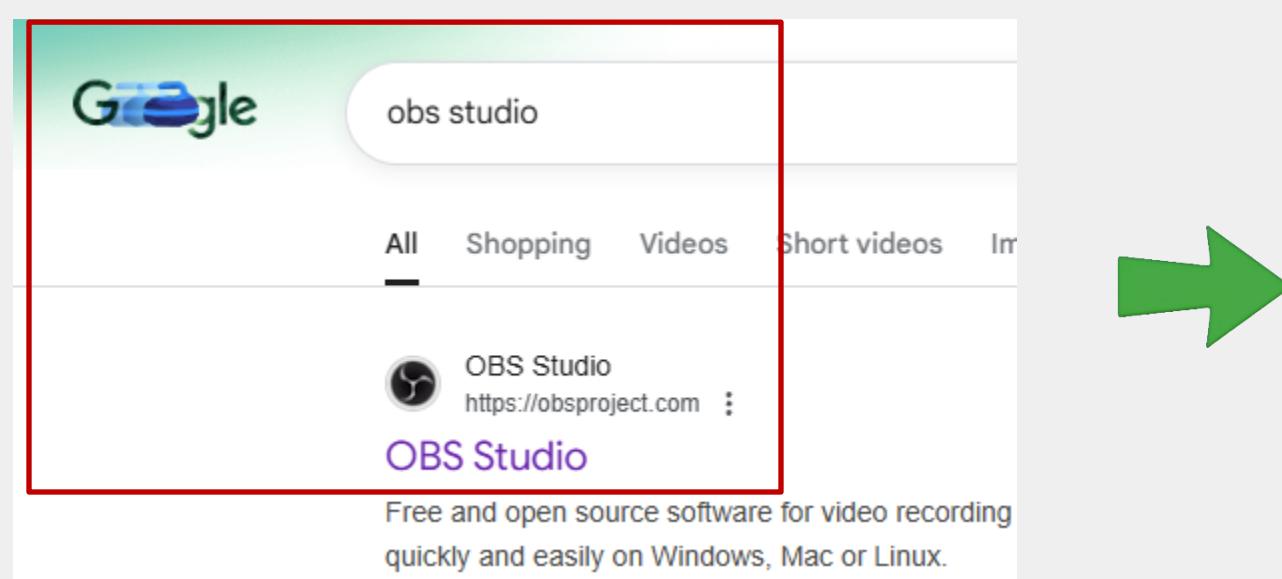
1. Video Recording Tool (OBS Studio)
2. Video Editing (Microsoft Clipchamp)

Capturing Screen from:

1. Computer Vision (The Video -5 Second)
2. Simulation (SUMO Environment – 5 Second)
3. Optimization (The Application – 5 Second)
4. Decision (Results – 5 Second)

Video Demonstration

- Google → OBS Studio → Download OBS Studio
- Install OBS Studio



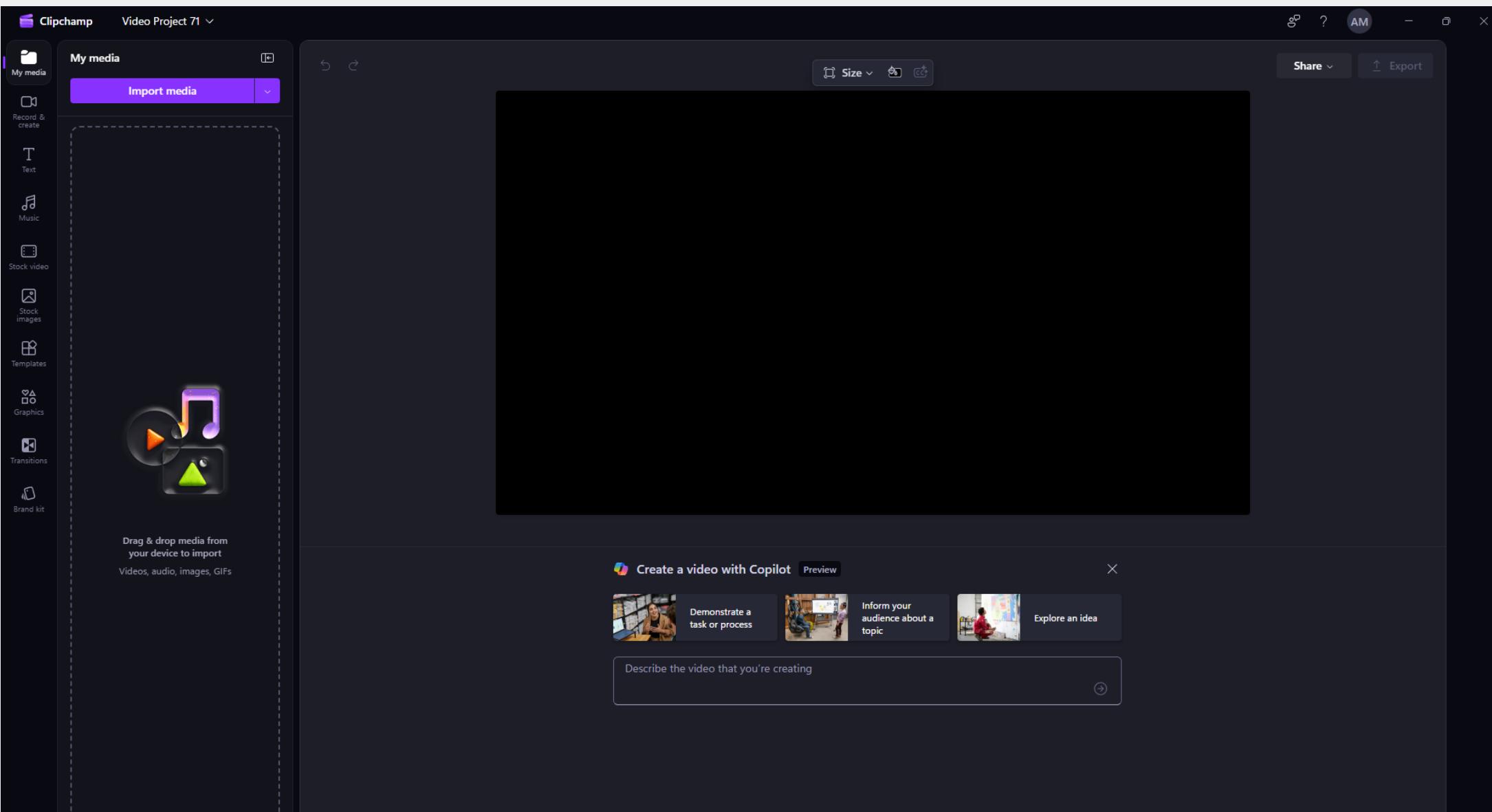
Video Demonstration

- Open OBS Studio**
- Select Start Recording**
- It Records Screen**

- Record 10 seconds of computer vision video**
- Record 10 seconds from your running simulation**
- Record 10 seconds from Simjam Application (e.g., optimization)**
- Record 10 seconds from Results (Showing Charts in Powerpoint)**

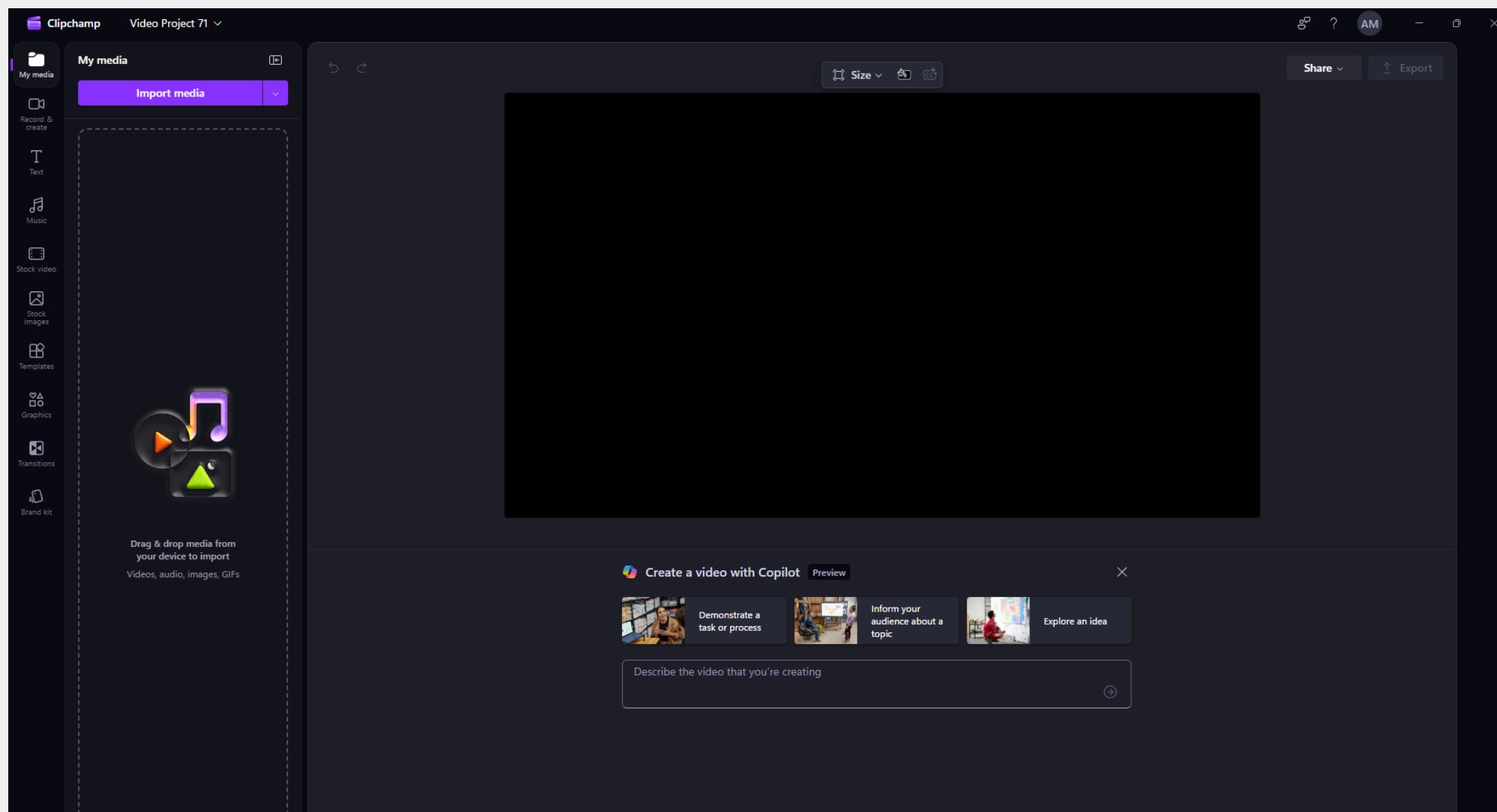
Video Demonstration

- We need to remove redundant parts
- We need to add some texts
- Use Microsoft ClipChamp (its free in windows)



Video Demonstration

- Import Media (Four Video Clips)
- Drag and drop video clips into clipchamp
- Add texts on top of each video (first video: Field Data Collection, Second Video: Digital Twin
Third Video (Traffic Signal Optimization), Fourth Video (Results) → Export Video



Video Demonstration

- Reduce video file size to less than 10 MB
- You can use <https://www.freeconvert.com/video-compressor>

Drag and Drop the video to



Video Compressor

World's best video compressor tool to reduce video file size

The screenshot shows the main interface of the FreeConvert Video Compressor. At the top, there's a red banner with the text "Edit your resume. Fast." and a "Start free trial" button. To the right of the banner is an "Adobe Acrobat Pro" logo. Below the banner is a large dashed blue rectangle labeled "Choose Files" with a plus sign icon. Below this is a note: "Max file size 1GB. [Sign Up](#) for more". At the bottom, there's a small note: "By proceeding, you agree to our [Terms of Use](#)".

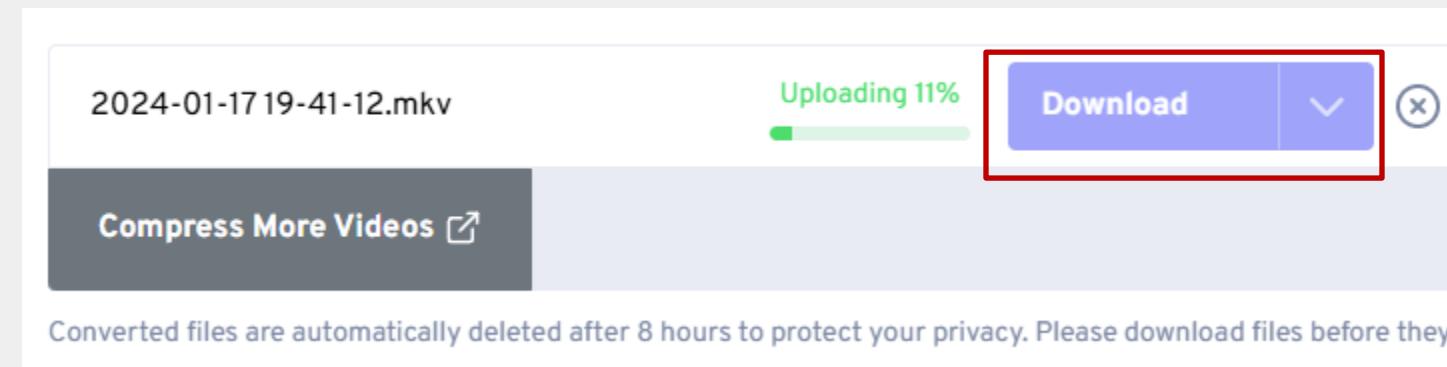


Select

The screenshot shows the "Select" step of the FreeConvert process. It displays a list of files: "2024-01-17 19-41-12.mkv" (175.54 MB). Below the file list is a message: "Added 1 files". On the right side, there's a "Compress Now!" button with a red border.

Video Demonstration

- Select Download Once its finished
- Check video size → Repeat the process until you get size less than 10 MB



Once its finished

Video Demonstration

- By the end of this tutorial, you would have result PowerPoint and video
- Next Week is how to write a formal technical report