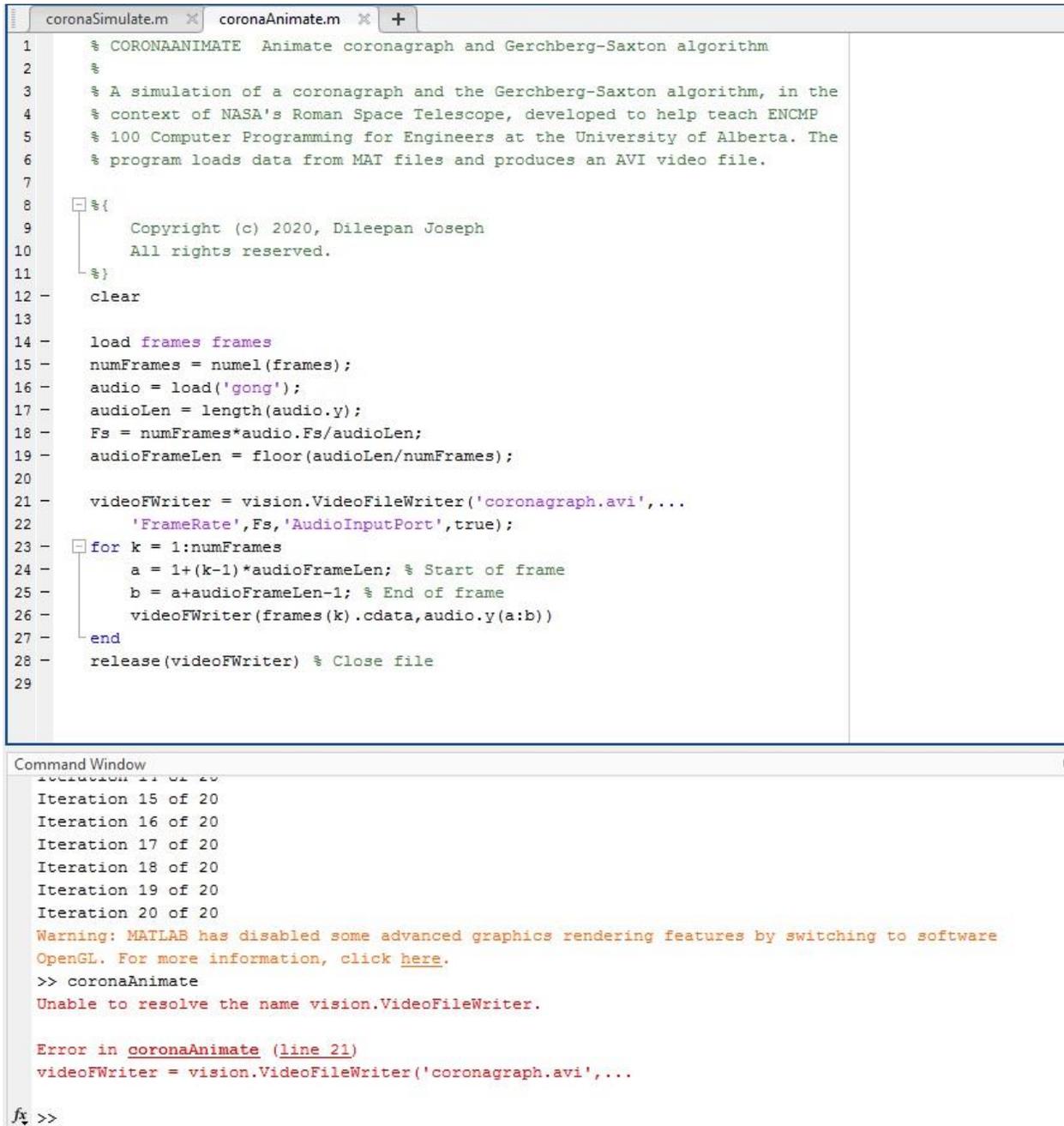


If you encounter this error, it's probably because you don't have the computer vision toolbox installed.



The image shows a MATLAB environment with two windows. The top window is a code editor for a file named 'coronaAnimate.m'. The code includes a header with a copyright notice for Dileepan Joseph (2020) and a for-loop that iterates over 20 frames, writing video data to a file named 'coronagraph.avi'. The bottom window is the Command Window, which shows the execution progress from iteration 15 to 20. A warning message indicates that MATLAB has disabled advanced graphics rendering features. The execution then fails with an error: 'Unable to resolve the name vision.VideoFileWriter.' and 'Error in coronaAnimate (line 21) videoFWriter = vision.VideoFileWriter('coronagraph.avi',...'.

```
1 % CORONAANIMATE Animate coronagraph and Gerchberg-Saxton algorithm
2 %
3 % A simulation of a coronagraph and the Gerchberg-Saxton algorithm, in the
4 % context of NASA's Roman Space Telescope, developed to help teach ENCMP
5 % 100 Computer Programming for Engineers at the University of Alberta. The
6 % program loads data from MAT files and produces an AVI video file.
7
8 % {
9     Copyright (c) 2020, Dileepan Joseph
10    All rights reserved.
11 % }
12 clear
13
14 load frames frames
15 numFrames = numel(frames);
16 audio = load('gong');
17 audioLen = length(audio.y);
18 Fs = numFrames*audio.Fs/audioLen;
19 audioFrameLen = floor(audioLen/numFrames);
20
21 videoFWriter = vision.VideoFileWriter('coronagraph.avi',...
22 'FrameRate',Fs,'AudioInputPort',true);
23 for k = 1:numFrames
24     a = 1+(k-1)*audioFrameLen; % Start of frame
25     b = a+audioFrameLen-1; % End of frame
26     videoFWriter(frames(k).cdata,audio.y(a:b))
27 end
28 release(videoFWriter) % Close file
29
```

```
Iteration 15 of 20
Iteration 16 of 20
Iteration 17 of 20
Iteration 18 of 20
Iteration 19 of 20
Iteration 20 of 20
Warning: MATLAB has disabled some advanced graphics rendering features by switching to software
OpenGL. For more information, click here.
>> coronaAnimate
Unable to resolve the name vision.VideoFileWriter.

Error in coronaAnimate (line 21)
videoFWriter = vision.VideoFileWriter('coronagraph.avi',...
```

Type `ver` in the command window to see if the toolbox is present.

```

Command Window

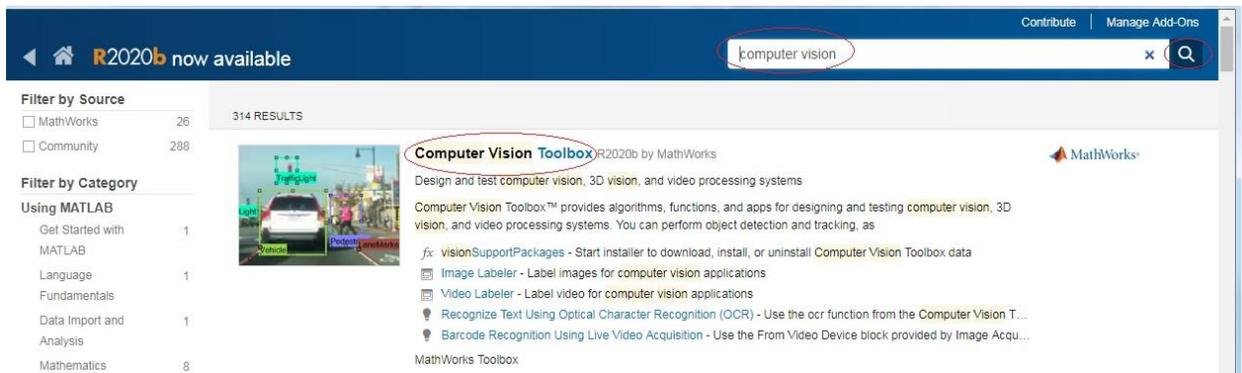
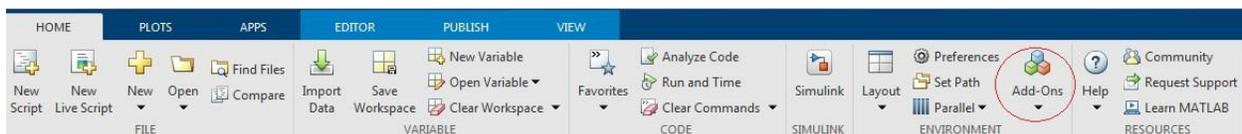
>> ver

-----
MATLAB Version: 9.8.0.1417392 (R2020a) Update 4
MATLAB License Number: 1088131
Operating System: Microsoft Windows 7 Enterprise Version 6.1 (Build 7601; Service Pack 1)
Java Version: Java 1.8.0_202-b08 with Oracle Corporation Java HotSpot(TM) 64-Bit Server VM mixed mode
-----

MATLAB                Version 9.8      (R2020a)
Simulink               Version 10.1    (R2020a)
5G Toolbox             Version 2.0     (R2020a)
AUTOSAR Blockset      Version 2.2     (R2020a)
Aerospace Blockset    Version 4.3     (R2020a)
Aerospace Toolbox     Version 3.3     (R2020a)
Antenna Toolbox       Version 4.2     (R2020a)
Audio Toolbox         Version 2.2     (R2020a)
Bioinformatics Toolbox Version 4.14    (R2020a)
Communications Toolbox Version 7.3     (R2020a)
Control System Toolbox Version 10.8    (R2020a)
Curve Fitting Toolbox Version 3.5.11 (R2020a)
DSP System Toolbox    Version 9.10    (R2020a)
Data Acquisition Toolbox Version 4.1     (R2020a)
Database Toolbox      Version 9.2.1   (R2020a)
Datafeed Toolbox      Version 5.9.1   (R2020a)
Deep Learning Toolbox Version 14.0    (R2020a)
Econometrics Toolbox  Version 5.4     (R2020a)
Embedded Coder        Version 7.4     (R2020a)

```

To install, follow the next few pictures



Contribute | Manage Add-Ons

R2020b now available

Search for add-ons



Computer Vision Toolbox

R2020b by MathWorks

Design and test computer vision, 3D vision, and video processing systems

MathWorks Toolbox

Learn More **Install**

Overview Functions Blocks Apps Examples

Confirm product installation

MATLAB will shut down now to install the selected product.

- Computer Vision Toolbox

Save your work before continuing.

Continue Cancel

Add-On Product Installer

The following MathWorks products will be installed:
Computer Vision Toolbox



MathWorks products are protected by patents (see mathworks.com/patents) and copyright laws. By entering into the Software License Agreement that follows, you will also agree to additional restrictions on your use of these programs. Any unauthorized use, reproduction, or distribution may result in civil and criminal penalties.

MATLAB and Simulink are registered trademarks of The MathWorks, Inc. Please see mathworks.com/trademarks for a list of additional trademarks. Other product or brand names may be trademarks or registered trademarks of their respective holders.

Next Cancel



This will take about 30 mins to install.

Recheck to see if toolbox is installed

```
Command Window
>> ver
-----
MATLAB Version: 9.8.0.1417392 (R2020a) Update 4
MATLAB License Number: 1088131
Operating System: Microsoft Windows 7 Enterprise Version 6.1 (Build 7601: Service Pack 1)
Java Version: Java 1.8.0_202-b08 with Oracle Corporation Java HotSpot(TM) 64-Bit Server VM mixed mode
-----
MATLAB                Version 9.8          (R2020a)
Simulink              Version 10.1         (R2020a)
5G Toolbox            Version 2.0          (R2020a)
AUTOSAR Blockset     Version 2.2          (R2020a)
Aerospace Blockset   Version 4.3          (R2020a)
Aerospace Toolbox     Version 3.3          (R2020a)
Antenna Toolbox       Version 4.2          (R2020a)
Audio Toolbox         Version 2.2          (R2020a)
Bioinformatics Toolbox Version 4.14         (R2020a)
Communications Toolbox Version 7.3          (R2020a)
Computer Vision Toolbox Version 9.2          (R2020a)
Control System Toolbox Version 10.8         (R2020a)
Curve Fitting Toolbox Version 3.5.11      (R2020a)
DSP System Toolbox    Version 9.10         (R2020a)
```