

RTC TOOLBOX

RTC stands for Real-Time Calculus. It is an extension of Network Calculus for system-level performance analysis of the distributed real-time and embedded systems. RTC Toolbox is based on Java and Matlab.

This documentation provides insight into installation of RTC Toolbox and its configuration:

1. Download MATLAB

- Download the latest version of MATLAB from the given link.

Link: [Matlab Download](#)

- You will be required to create a MathWorks account before downloading.
- After creating an account, download an installer.

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R2021b

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Includes R2021b Update 2 (06 Jan 2022)

Installation Instructions

1. Download and launch the installer.
2. Sign in as *amir.paudel@siu.edu*.

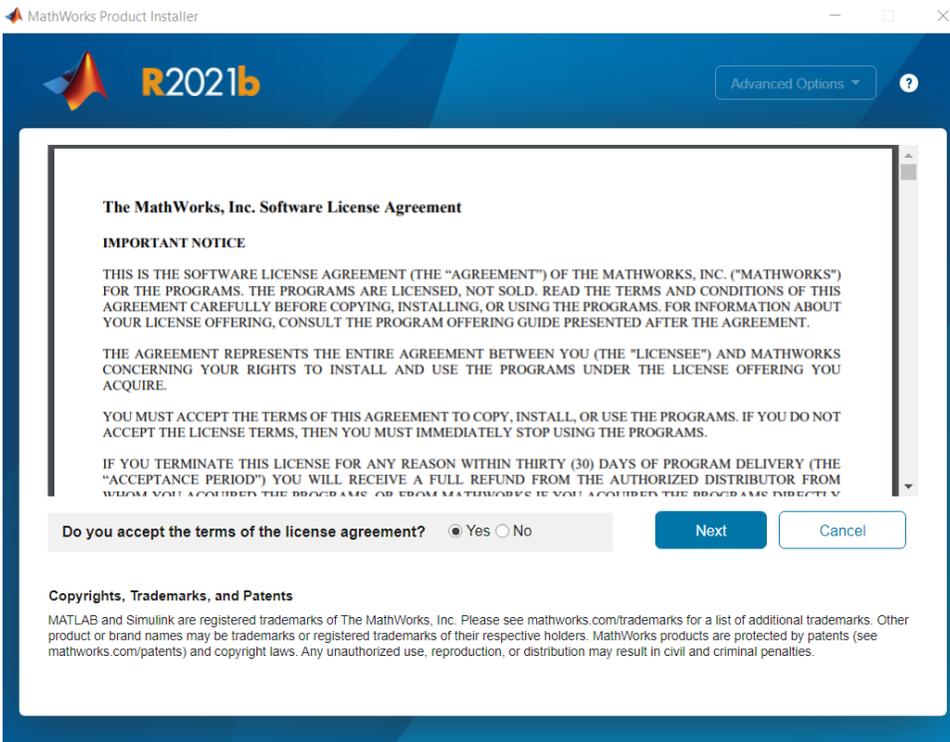
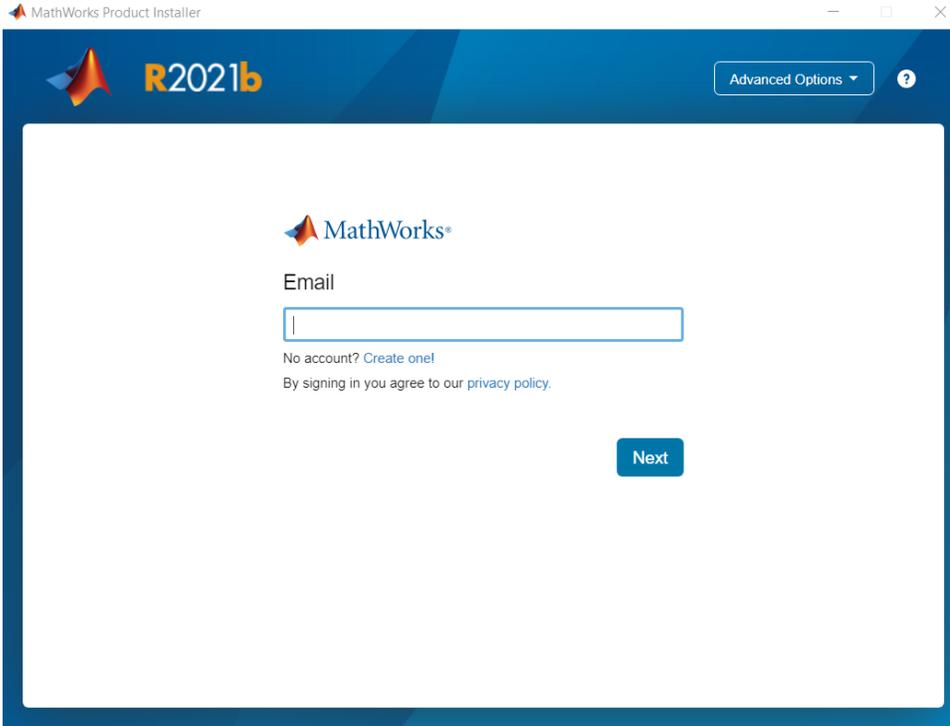
In addition to installing MATLAB, you can also add products to your existing installation or download product files for installation on an offline machine.

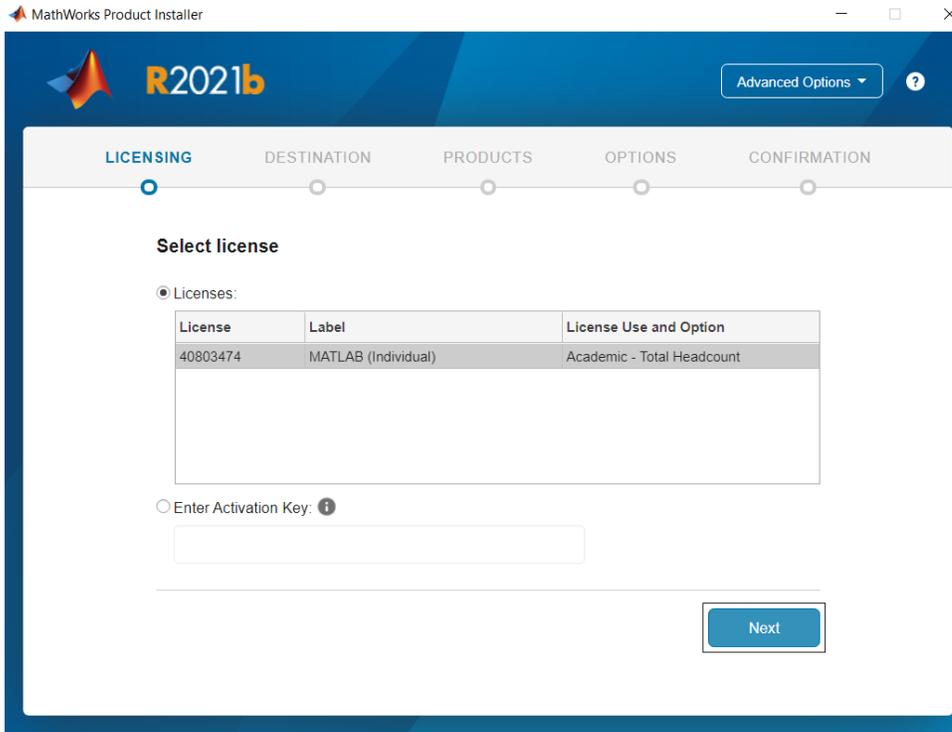
Download details:

- *matlab_R2021b_win64.exe (197 MB, MD5: 9c0371b396dc74b82b6a95cfe822b689)*

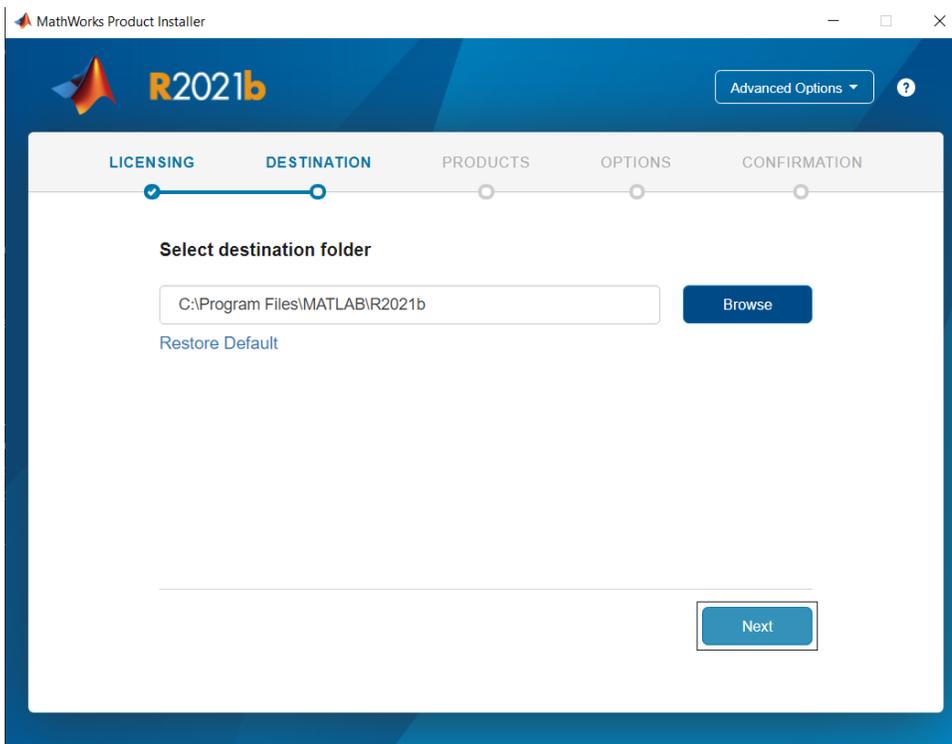
2. Install the MATLAB into the desired directory.

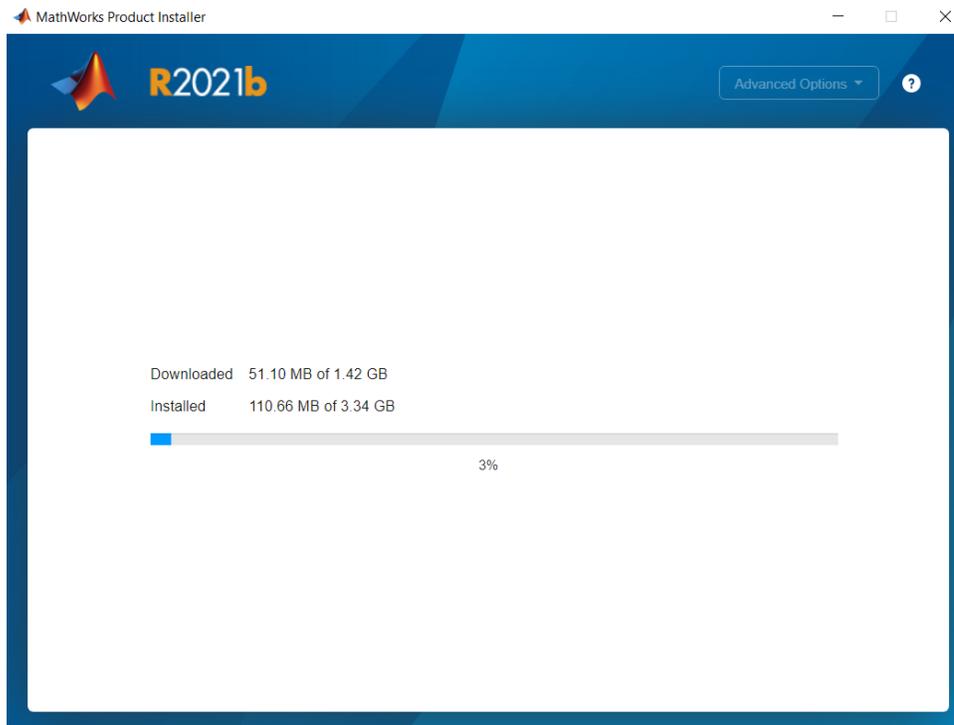
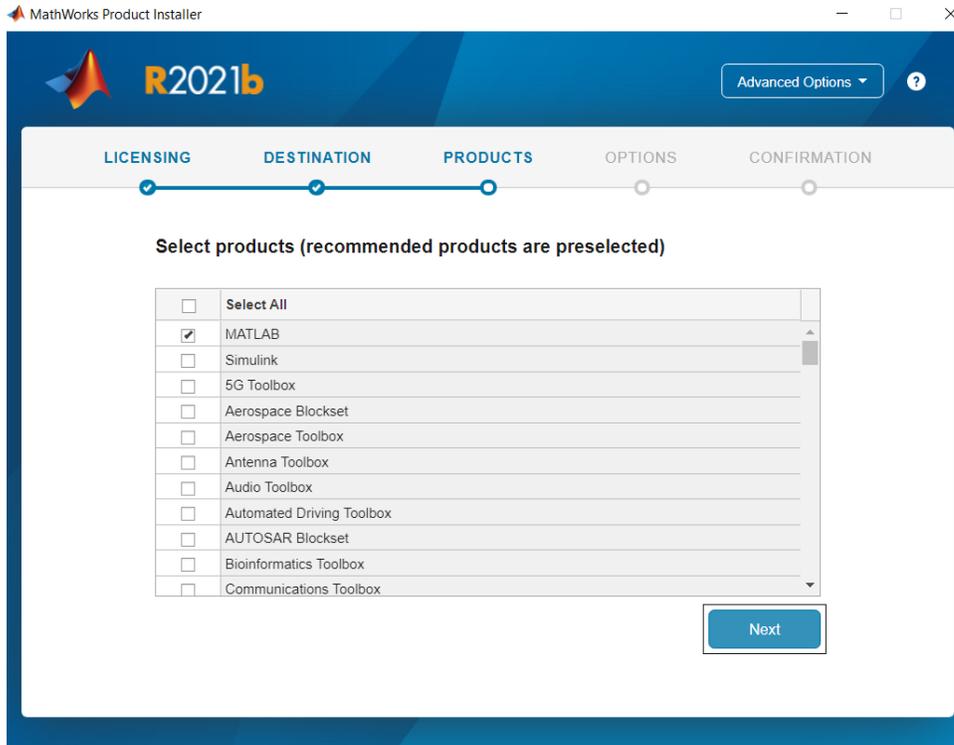
- Launch the Matlab Installer
- Login using your MathWorks email



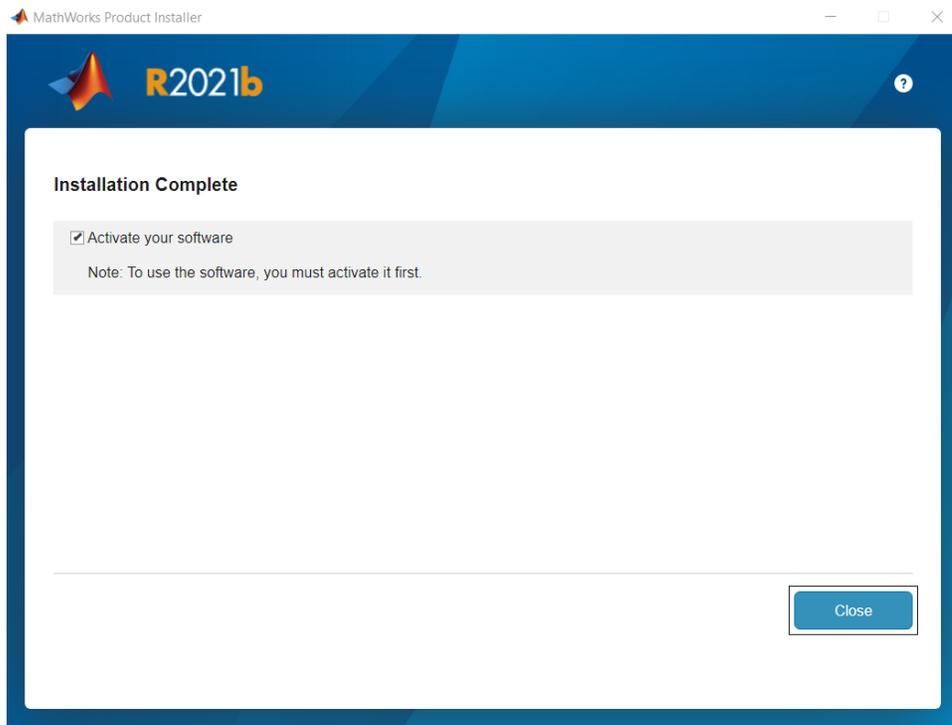


- Select the destination folder





- After installation is complete, launch the MATLAB

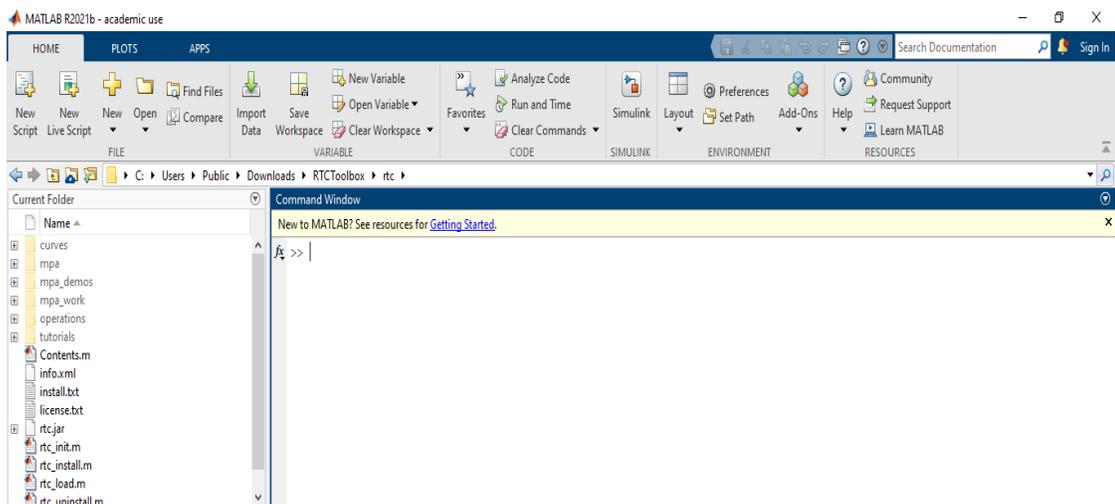


3. Download and Install RTC Toolbox

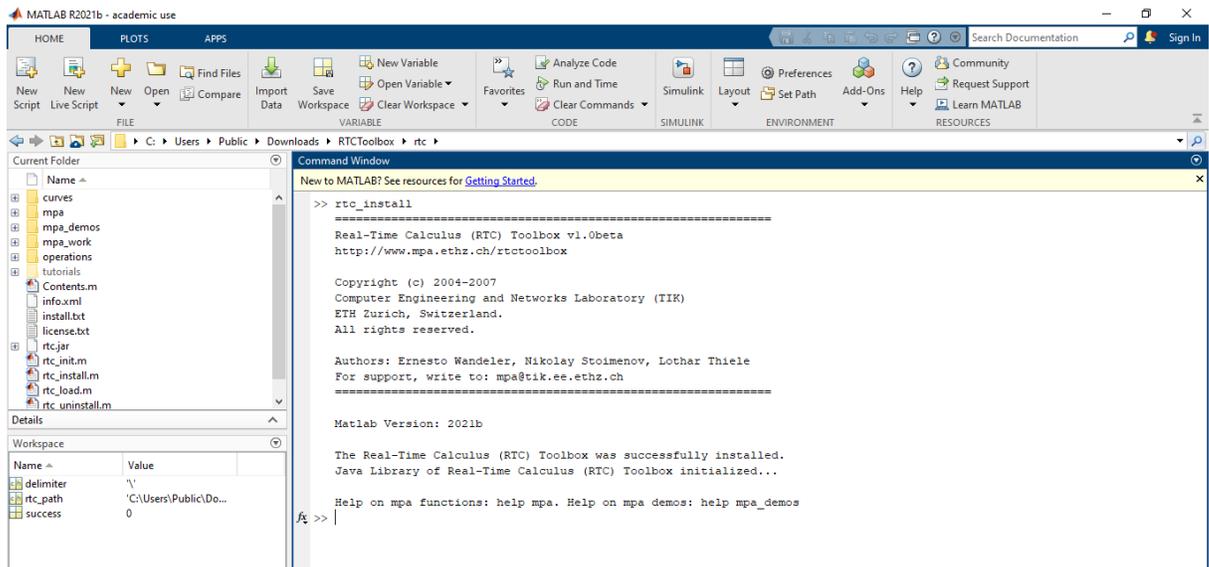
- Download the latest release of the toolbox

Link : [RTC Toolbox](#)

- After download, extract the downloaded zip package.
- Copy the folder **rtc** to its installation destination.
- Open the Matlab and change to the **rtc** directory.



- Now run the following code to install RTC Toolbox



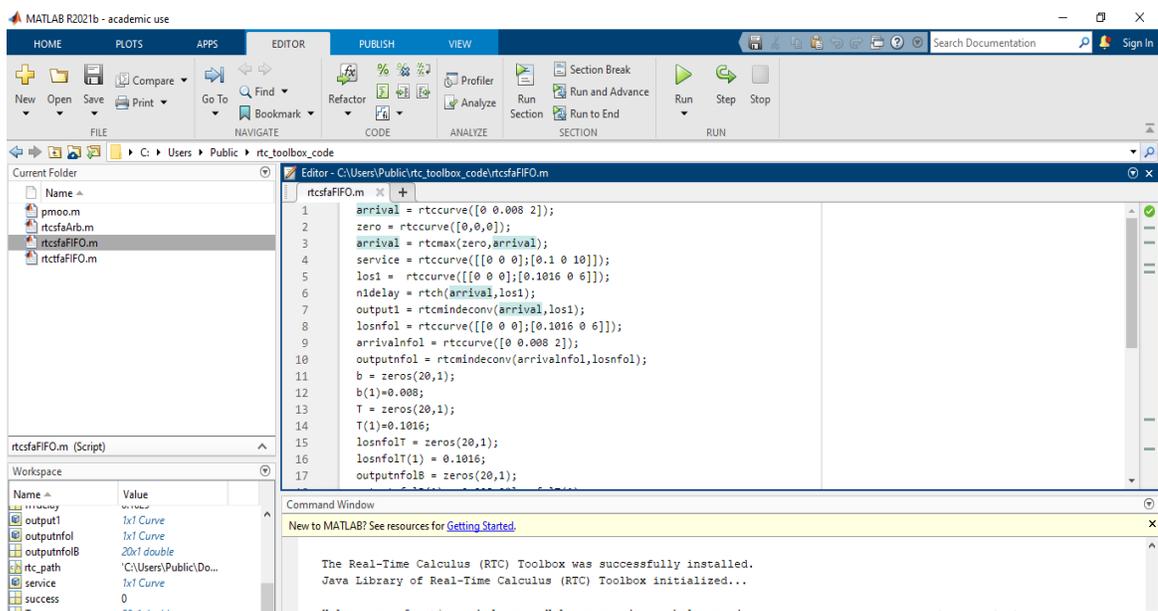
- Now the RTC toolbox is completely installed.

4. Running the Code

- Download the code from the portal for network analysis.

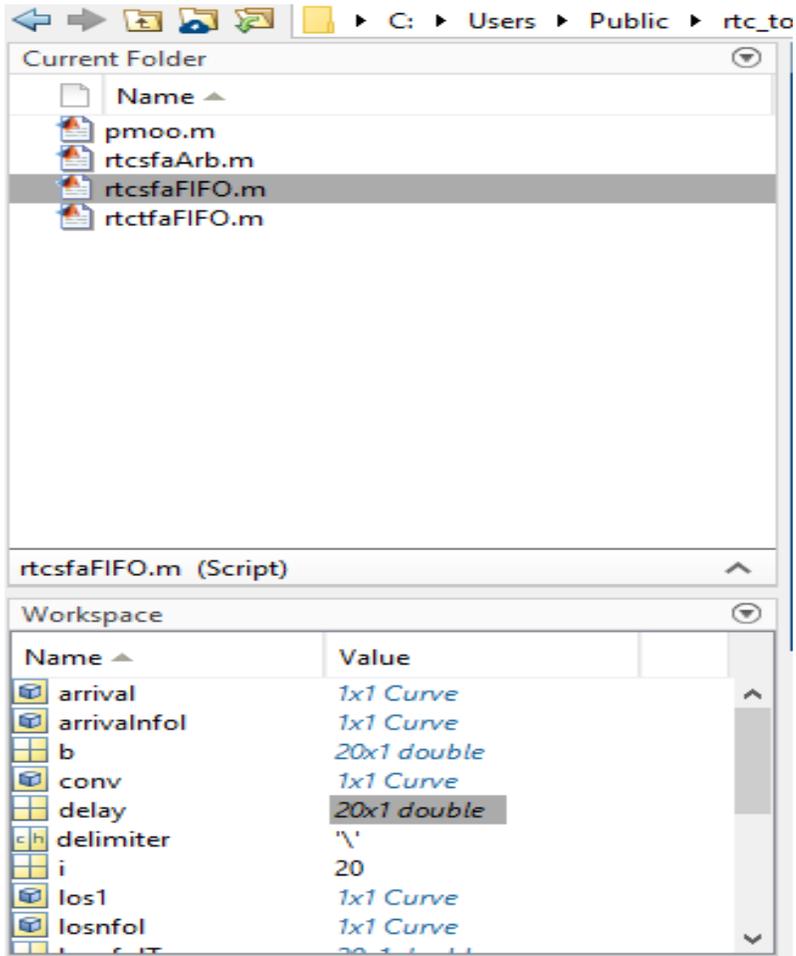
Link:

- Import the code into the Matlab.

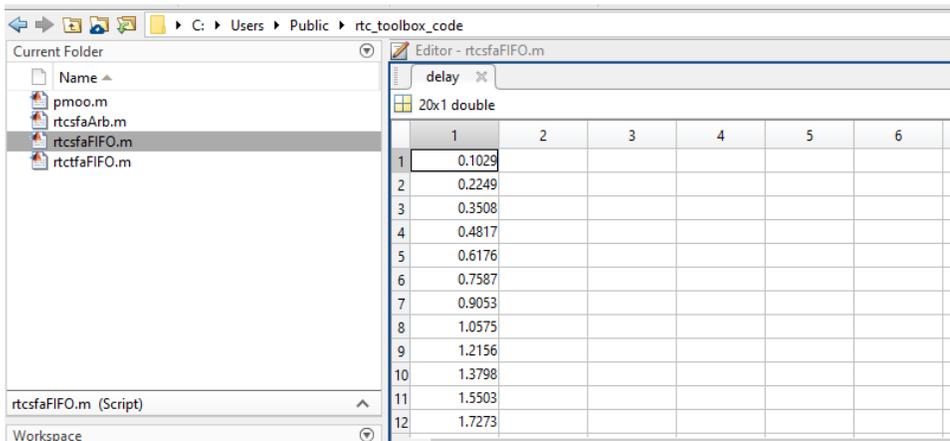


- Run the code to get the delay estimate.

- After the code is run, we will have the result on the left bottom panel of the Matlab as shown in image below:



- Open the delay variables. It displays all the values of the delays in a new window.



- Plot the delays to get a graph using any visualization technique.

