

# Nets to Bytes in an Hour: Crafting and Deploying Optimal Tiny Deep Learning Networks with MATLAB and STM32Cube.AI Developer Cloud

## Hardware and Software Requirements

To participate in the workshop, you need:

1. A laptop
2. Google Chrome browser
3. A MathWorks account
4. A myST Account



You will be provided with a temporary MATLAB workshop license that will give you access to all products used in the workshop, as well as the workshop exercise files. Access to STM32Cube.AI Dev Cloud is public and free.

Please download a copy of this document to be able to click on the links provided.

## Need Help?

If you run into any issues completing the steps below, please join the following Microsoft Teams meeting and our TAs will help you troubleshoot: [Click here to join the meeting](#)

This team of virtual TAs will also be available to aid throughout the tutorial exercises.

## Step I. Set Up Your MathWorks Account

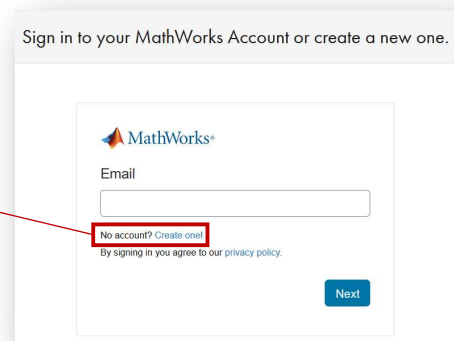
If you don't have a MathWorks account, you need to create one to get access to MATLAB Online and the material for this event. You will need access to your email on the machine you are using to create the account.

1. In Google Chrome, go to: <https://www.mathworks.com/mwaccount/> and click **Create one!** next to No Account?:

No account? [Create one!](#)

2. Fill out the form and click **Create**. Follow the directions for verifying your email address.
3. To complete your registration, click the link in the verification email and fill out the form.  
**You must check the Online Services Agreement box.**

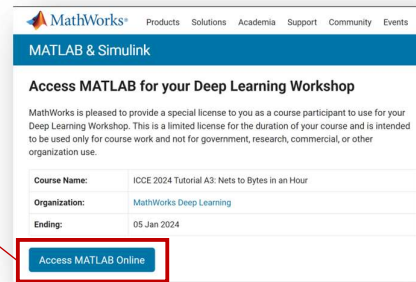
You may leave these fields blank: Activation Key or License Number, Sales rep contact, Associate with a license, Trial



## Step II. Activate the Workshop License

The workshop uses MATLAB Online. You must activate the workshop license to participate. You can activate this license starting from the day of the workshop up to a week after the workshop date.

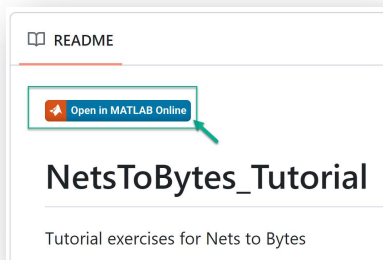
1. Navigate to this address in Google Chrome:  
<https://www.mathworks.com/licensecenter/classroom/4300904/>
2. If you are not already logged in, do so.
3. Click **Access MATLAB Online**.



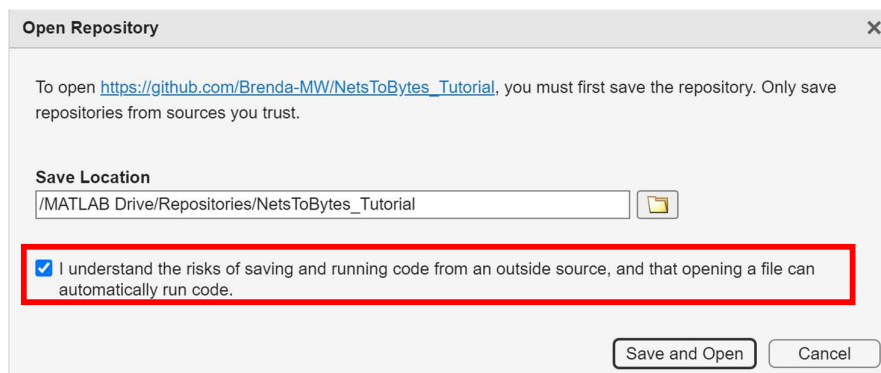
### Step III. Access Exercise Files

MATLAB Online can port your workshop files from GitHub automatically. You will see a dialog pop-up for saving and opening the repository of files.

1. Exercise files are located at: <https://github.com/Brenda-MW/NetsToBytesWithMATLAB>
2. Directly launch the workshop links from the “Open in MATLAB Online” button in README.



3. Click on the checkbox to accept outside source code.
4. To access the files, hit “Save and Open”.



### Step IV. Verify Your Environment

To verify that your environment is correctly set up for the exercises:

1. Run the command below in the MATLAB Online Command Window:

**>> NetsToBytes\_Setup**

2. Confirm that the **welcome message** is displayed.

```
Command Window
>> NetsToBytes_Setup

Welcome to the Nets to Bytes Tutorial at ICCE 2024!

You have write permission in this folder.

Initializing the exercises...

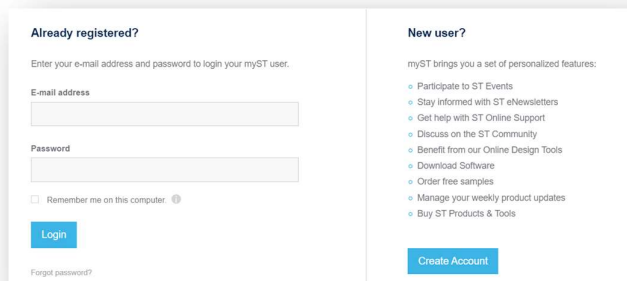
Environment Check is Complete!

Enjoy the workshop!
>> |
```

## Step V. Create myST account

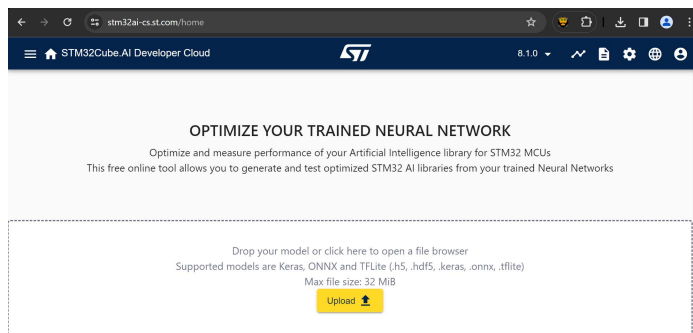
If you don't have a myST account, you need to create one to get access to STM32Cube.AI Dev Cloud and use the material for this event. You will need access to your email on the machine you are using to create the account.

1. Navigate to this address in Google Chrome: [stm32ai-cs.st.com/home](http://stm32ai-cs.st.com/home) and click *Sign In*
2. Create an account by filling out the form and click Create. Follow the directions for verifying your email address.
3. To complete your registration, click the link in the verification email and fill out the form.



The form is split into two columns. The left column is titled 'Already registered?' and contains fields for 'E-mail address' and 'Password', a 'Remember me on this computer' checkbox, a 'Login' button, and a 'Forgot password?' link. The right column is titled 'New user?' and lists features of myST, followed by a 'Create Account' button.

4. Successful log on shows the interface to upload models.



Congratulations! You are all set up to join us on the hands-on tutorial! Have fun!