

Edge AI Workshop - Getting Started Guide

1. Board Datasheet

You will be using the VSD Squadron Pro RISC-V Development Board in this workshop.

Even if you haven't purchased the board with the workshop, we recommend going through the datasheet to understand the board features.

Download the Board Datasheet:

👉 <https://www.vlsisystemdesign.com/wp-content/uploads/2024/10/datasheet.pdf>

2. Installing SiFive Software

To program and debug the RISC-V development board, you will need SiFive Freedom Studio.

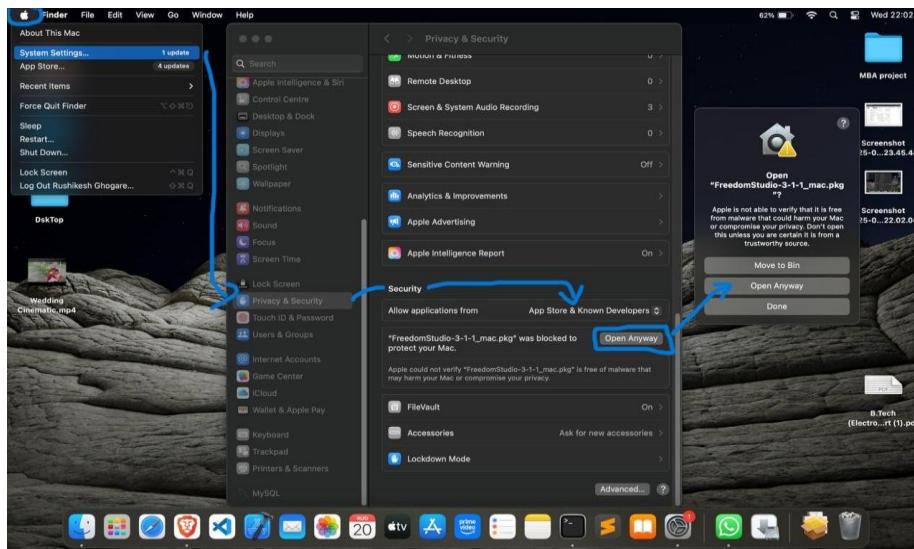
We suggest downloading it even if you don't have the board, so you can test if the code builds correctly

For Windows Users: -

1. Follow **Step 2: Installation and Settings** in the Datasheet (page 10).

For Mac Users: -

1. Download Freedom Studio from https://vsd-labs.sgp1.cdn.digitaloceanspaces.com/vsd-labs/FreedomStudio-3-1-1_mac.pkg
2. Install the Software.
3. If macOS blocks the installation:
 - a. Go to **System Settings** → **Privacy & Security** → **Security**
 - b. Ensure *Allow apps downloaded from* is set to **App Store & Known Developers**
 - c. Click **Open Anyway** for `FreedomStudio-3-1-1_mac.pkg`



3. Running Example Program on VSDSquadron Pro: -

You can test your setup by running the “**sifive-welcome**” example program.

1. Follow Step 2.3 in the Datasheet (page 11).
2. If you face SDK issues:
 - a. Download the SDK: Freedom E SDK v21.11.00.00 from <https://vsd-labs.sgp1.cdn.digitaloceanspaces.com/vsd-labs/freedom-e-sdk-v21.11.00.00.zip>
 - b. Extract the contents.
 - c. Update the SDK path to this folder while creating the project.

4. Download Workshop Datasets: -

Please download the following datasets for use during the workshop:

- Student Scores :- <https://media.vlsisystemdesign.com/media/studentscores-1fef94ba-27e1-4fab-a7ad-56867b8fb5a1.csv>
- 50 Startups:- https://media.vlsisystemdesign.com/media/50_Startups-61ce93eb-d671-42db-a5e1-005e0a176393.csv
- Social Network Ads:- https://media.vlsisystemdesign.com/media/Social_Network_Ads-9fe0a38d-3fd1-4562-8ef4-528f57d15d5f.csv

4. Start the Workshop

Once your board and software are ready, and the Datasets are Downloaded, you can begin the Edge AI Workshop. 