TinyMLjs

Training an ML microcontroller model using a static webpage

Demo on Cell phone or laptop

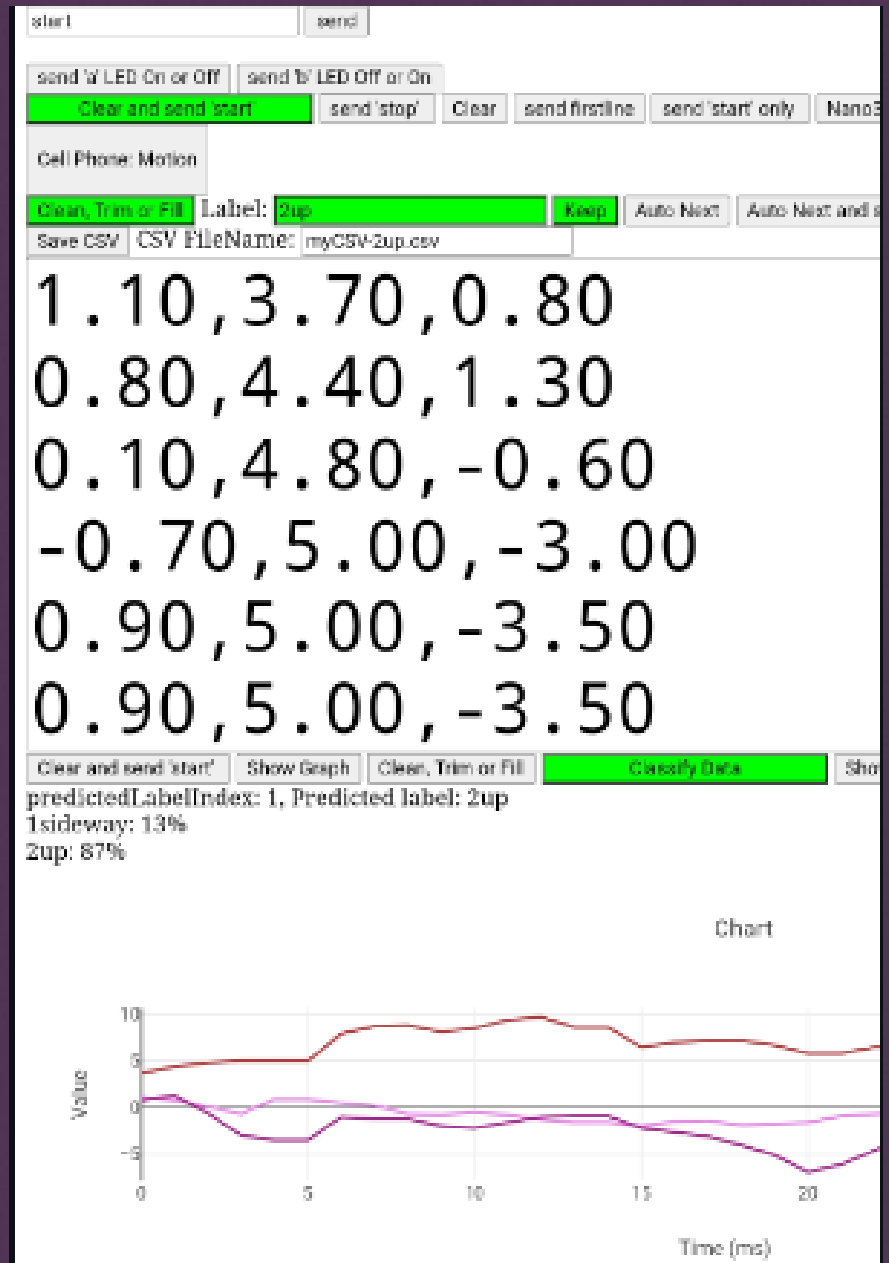
https://hpssjellis.github.io/tinyMLjs/public/acceleration/a00-best-acceleration-rak2270-sticker-tracker.html

Why use Javascript to train ML for microcontrollers?

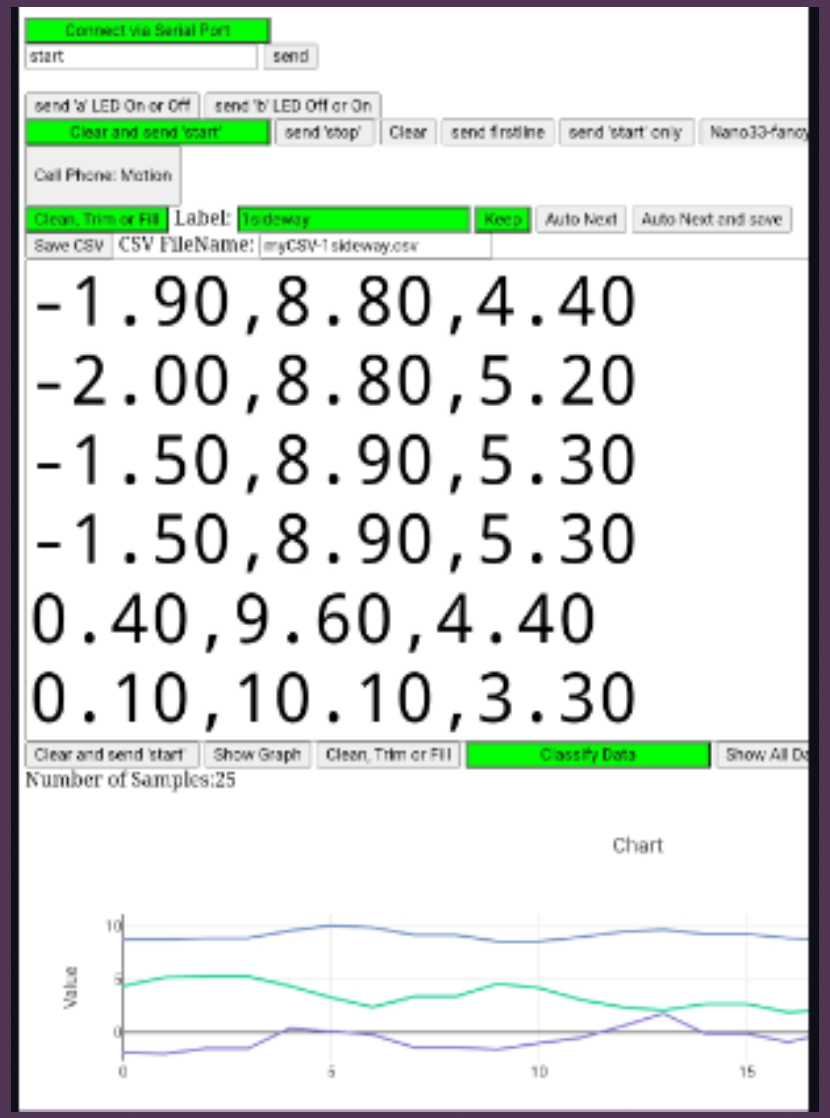
- 1. Reduce deprecation issues
- 2. Reduce cloud costs
- 3. Full control of everything
- 4. True data privacy
- 5. No need for an internet connection
- 6. Huge WebML community
- 7. Ease of use for beginners and students

Start the SPA (single page application)

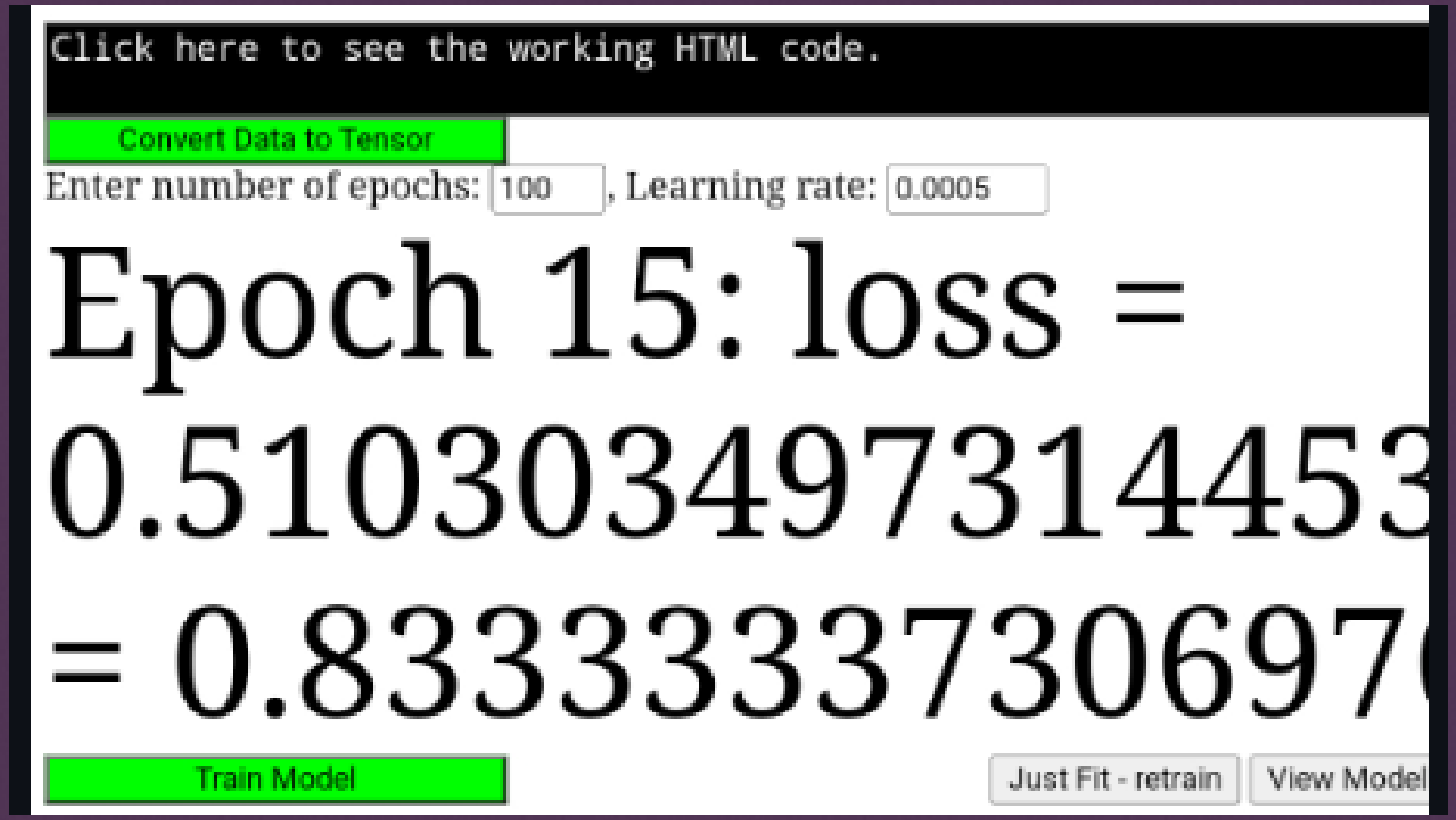
Collect Data



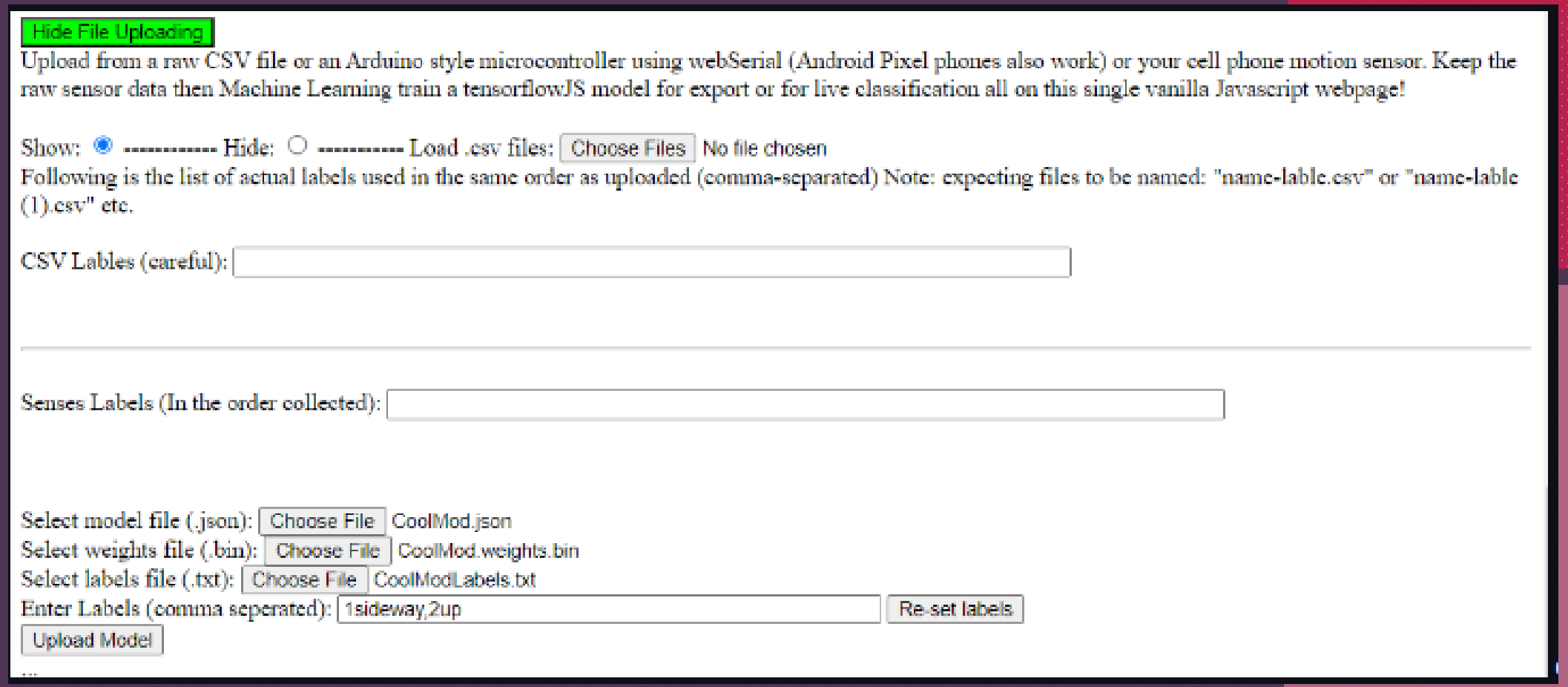
I do 3 moving sideways and 3 moving up. Change the label!



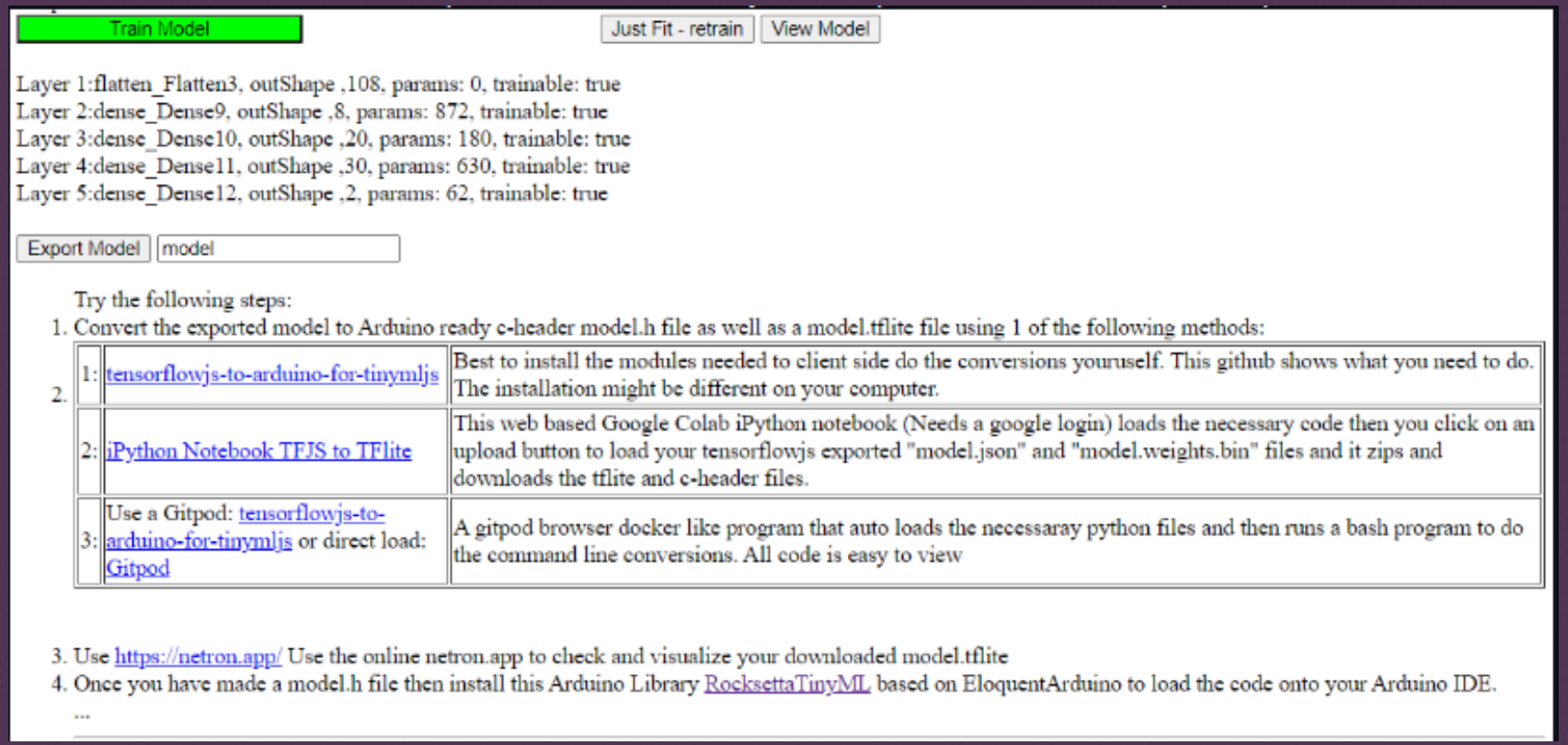
Clean, Trim and Fill, then convert to tensor, then train



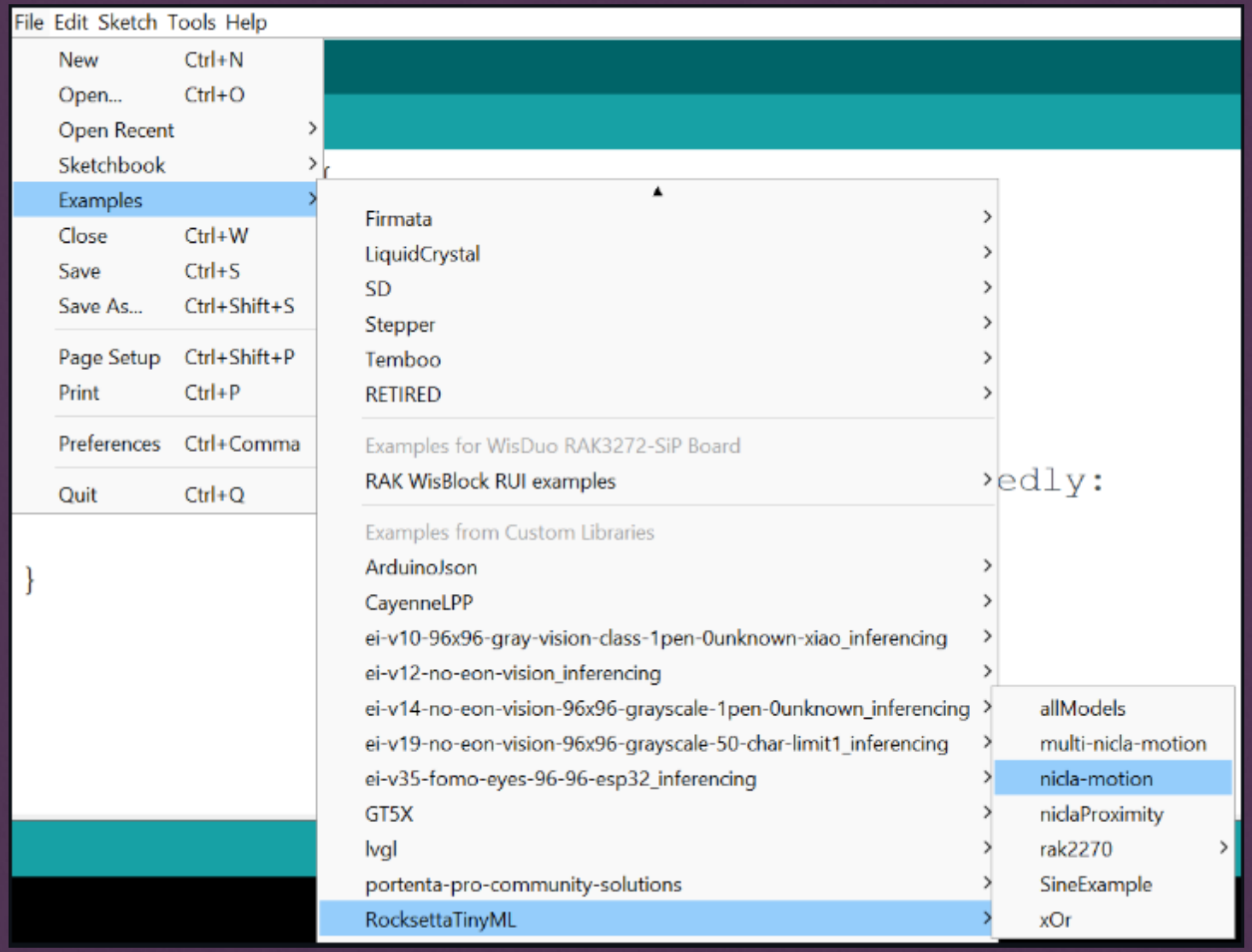
Possible to both save and upload saved CSV file data



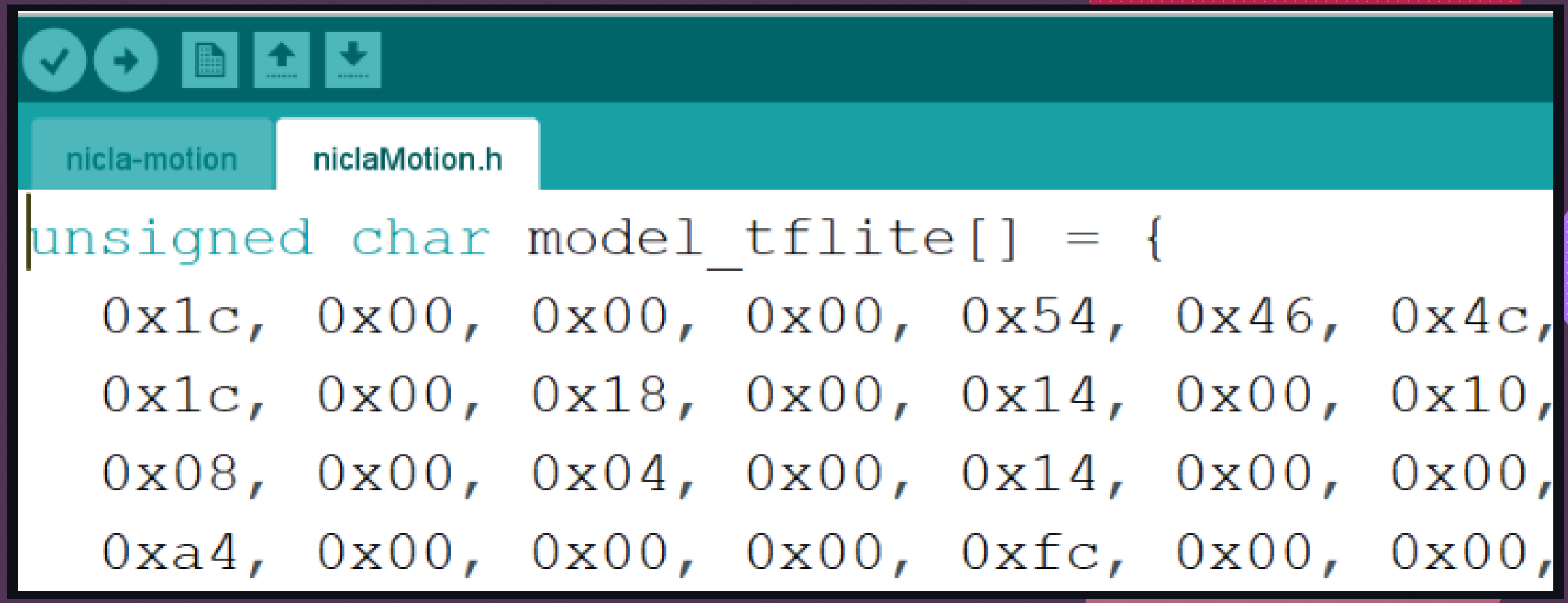
Now the hard part, converting tfjs to tflite then a c-header file



Once RocksettaTinyML installed on the Arduino IDE, load an example and…



Replace the c-header file wit your new c-header file



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TinyMLjs Demo

- A new possibility for Educators teaching Machine Learning for Microcontrollers