# IESTI01 - TinyML - 2021.2

Final Group Project Proposal

Project Proposal Delivery date: October 20th

Groups should have preferable a minimum of 3 and a maximum of 4 participants.

### Suggested Project Template

- 1. Project name
- 2. Team member names, number (if applicable) and, Institution
- 3. Project Objectives (Goal) short description
- 4. Longer project description
- 5. References (including other code or data), sources of inspiration
- **6.** Descriptions of the following, at whatever depth the team feels appropriate:
  - a. Block Diagram
  - b. Hardware to be utilized
  - c. Data collection
  - d. Preprocessing
  - e. Model design
  - **f.** Optimizations
  - g. In system inference (Deploy)
- 7. Issues or roadblocks the team envision and potential solutions
- 8. The top unresolved question(s) the team have at this point

### Suggested Public Dataset repositories to be explored:

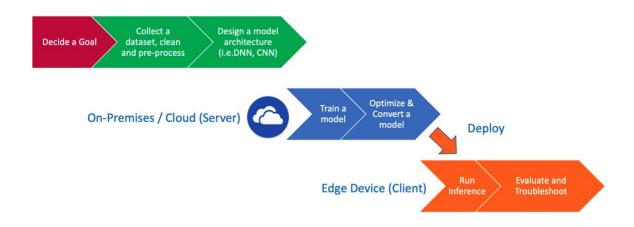
- https://www.kaggle.com/datasets
- https://archive.ics.uci.edu/ml/datasets.php
- https://knowyourdata.withgoogle.com/
- <a href="https://datasetsearch.research.google.com/">https://datasetsearch.research.google.com/</a>

### Previous Projects Inspiration:

- 1. IESTI01 2021.1 Group Presentations
  - Group 1 Seismic Detection [Docs] [Video]
  - Group 2 Fire Detection [Docs] [Video]
  - o Group 3 Covid Detection (cough) [Docs] [Video]
  - Group 4 Mask Detection [Docs] [Video]
  - o Group 5 Personal Trainer [Docs] [Video]
- 2. Harvard CS249r TinyML Final Projects

Suggested Project Workflow

# **Edge Machine Learning Workflow**



#### **Final Comments**

The Project Proposal to be delivered **is not binding**, what means that the group can decide later keep this project or to develop another one completely different.