

IESTIO1 – TinyML - 2022.1

Final Group Project **Proposal**

Project Proposal Delivery date: May 25th

Groups should have preferred 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/>
- <https://datasetsearch.research.google.com/>

Previous Projects Inspiration:

1. IESTIO1 2021.1 - Group Presentations

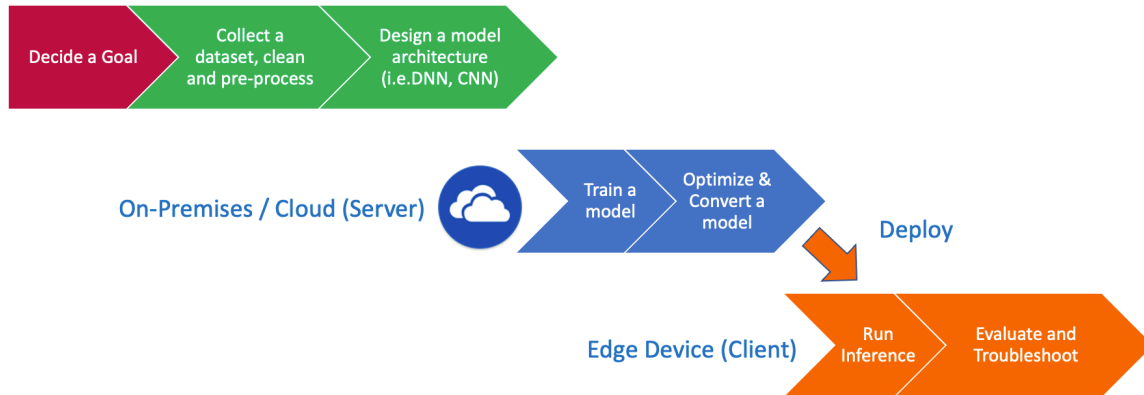
- Group 1 - Seismic Detection [\[Docs\]](#) [\[Video\]](#)
- Group 2 - Fire Detection [\[Docs\]](#) [\[Video\]](#)
- Group 3 - Covid Detection (cough) [\[Docs\]](#) [\[Video\]](#)
- Group 4 - Mask Detection [\[Docs\]](#) [\[Video\]](#)
- Group 5 - Personal Trainer [\[Docs\]](#) [\[Video\]](#)

2. IESTIO1 2021.2 - Group Presentations

- Groups 1, 2, 3, 4, 5 [\[Video\]](#)
 - 1-Keyboard
 - 2-Sobriety
 - 3-Bearing
 - 4-Ex-Maquina
 - 5-Helmet
- Groups 6, 7 [\[Video\]](#)
 - 6-Emotions
 - 7-Electricity
- Group [\[Proposals\]](#)
- Group [\[Final Reports\]](#)

3. Harvard CS249r – TinyML - Final Projects

Edge Machine Learning Workflow



Final Comments

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