Head Hunters

Brian Boner, Jason Nguyen, Leon Vaughan, Dimitris Veliadis

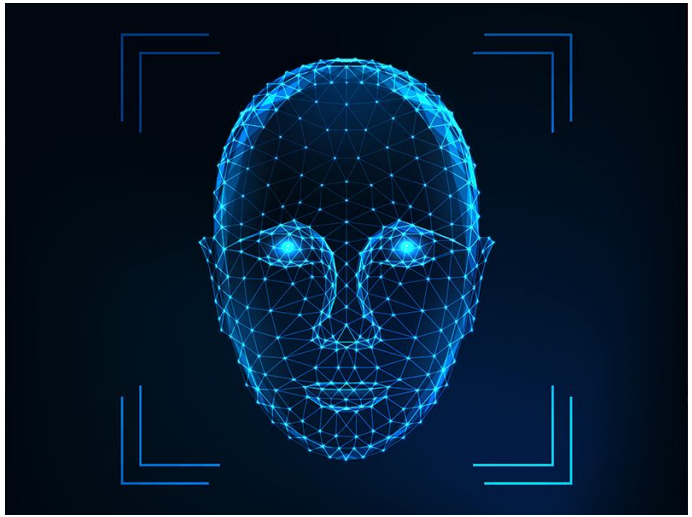
Key Objectives:

Implement Face Detection Model: Use TinyML-compatible lightweight model (e.g., MobileNet) tailored for Arduino to detect and recognize faces within constrained hardware limits.

Develop Real-time Face Recognition System: Enable real-time face detection and recognition with minimal latency, using camera input and Arduino processing.

Evaluate Model Accuracy and Performance: Test and refine model accuracy and speed, focusing on high recognition rates and low false positives within the project's hardware constraints.

Document System Design and Code: Provide clear documentation for the setup, code, and overall system to aid reproducibility and future improvements.



Expected Outcomes:

- A TinyML system that is able to compare and identify one of four faces.
- We will use training data of facial images from different perspectives for each of the four members of the group.
- The system should ultimately correctly identify the member of the group in real-time