1. Project number: S20-31

2. Project title (as will appear on the poster):
AEGIS: ARTIFICIALLY ENABLED GUARDIAN IDENTIFICATION SYSTEM

3. Team members: Team 31

4. Adviser(s) name(s): Maria Striki

5. Up to 5 keywords that will help to classify the project scope:
   Machine Learning, Facial Recognition, Security,

6. Project abstract (up to 250 words) to be shared with judges:

   In the 21st century, security is more important than anything. Companies such as Google created an Authentication app that constantly changes your account key’s so no one can save your password one time and have access indefinitely. Security is a hot topic, yet some people forget to keep one very important thing safe, their home. In the united states alone, there is an attempted aggravated assault in a home every 45 seconds. Most intruders enter the home when individual household members open the door with out checking through the peep hole to see who is at the door. People truly take security that their front door offers for granted. Therefore our team has developed the AEGIS, the artificially enable guardian identification system. Our project will use Machine learning to intelligently label and announce to the house who is at their front door. Before training a model would take 8+ hours. With OpenCV we can train a model within a few minutes will little accuracy lost. Because of this our model will be able to continuously learn every time it detects a face. With AEGIS, if there is a stranger at the door step, out device will detect the stranger, take a picture, and display the name on the photo frame inside the home and announce “Stranger Alert” alerting the individual opening the door of the potential danger. With this implementation we expect to decrease home invasion and keep your loved ones safe and sound.