

Low power high FPS object detection

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Type of items to be demonstrated: Standalone devices that can detect the presence of object classes such as face, people, QR-codes, and other objects. This demonstration will show that object detection can occur without line power while having the capability to run for many months without the need to change the battery.

Relevance to TinyML: Historically, computer vision has a high system power. We will show our continued improvements to computer vision with a low system power and aggressive frame rate. TinyML devices often exist without the benefits of line power. We will show that we can detect a variety of object classes without line power. Even further, we will show this capability in a platform that can exist months without a change of battery. Third party users can use this device and our SW platform to easily train their own classes to run on our device. This technology is available for many use cases at high FPS including face detection, human detection, and other object classes such as company/product logos.