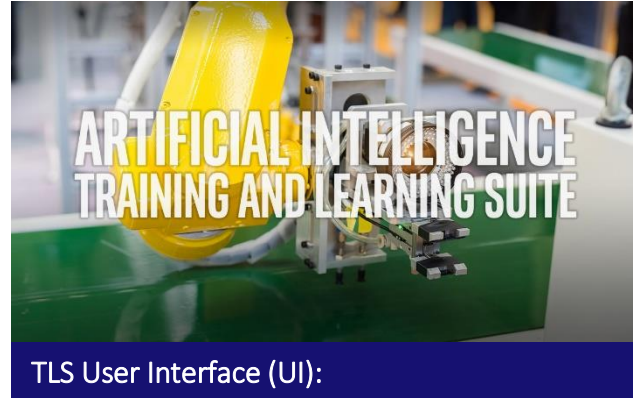


Intel® AI Deep Learning Software (TLS)

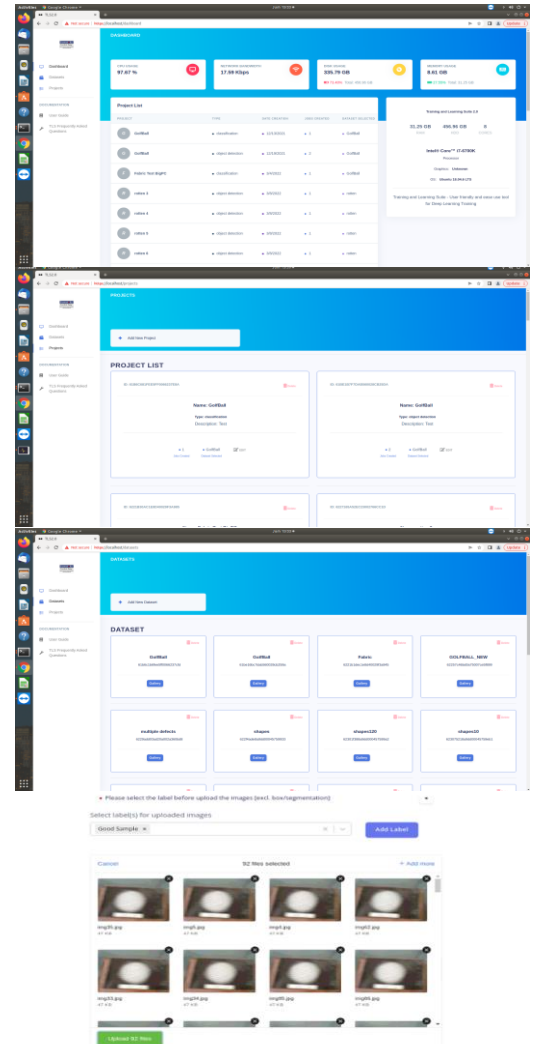
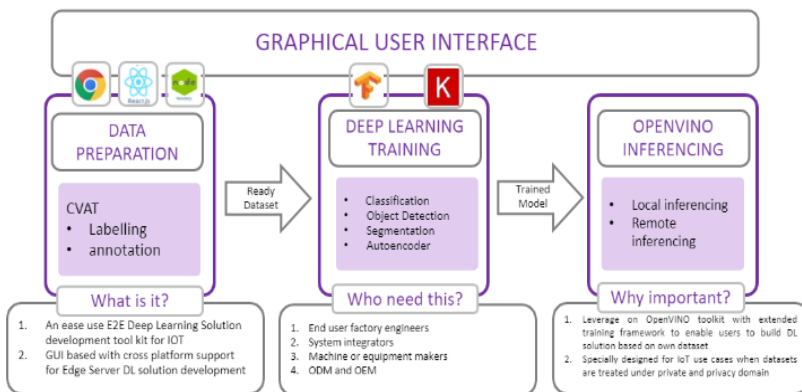
The Intel® Training and Learning Suite 2.0 (TLS) is the next generation of TLS1.0 with significant changes at the back-end and front-end. The goal is to enable Intel Customers with more popular tools and better user experience for training a deep learning and creating a model for inferencing. TLS2.0 integrates the CVAT Annotation Tool, which is a popular annotation tool for data scientists to label uploaded images. The dataset created can be easily linked up with the TLS project creation and data scientists can start model training with TensorFlow in just a few clicks.



TLS User Interface (UI):

Intel TLS 2.0 Architecture

TLS 2.0 comes with advanced features compared to TLS1.0. The CVAT feature is now enabled for data preparation that includes labelling and annotation tools. It is easy to use the end-to-end (E2E) Deep Learning solution development toolkit for IoT. The GUI is also multi-platform-based, and it can support Edge Server DL Solution development. The training will be performed using the Keras API and TensorFlow. TensorFlow is an end-to-end open-source platform for machine learning. It's a comprehensive and flexible ecosystem of tools, libraries, and other resources that provide workflows with high-level APIs. After the data preparation, the data can be trained using 4 tasks, which are Classification, Object Detection, Segmentation, and Auto-encoder. The training will be performed using the Keras API and TensorFlow. TensorFlow is an end-to-end open-source platform for machine learning.



Application with OpenCV & Openvino

The usage of model from TLS is benefitted by applying into Python. The system must be integrated with AI inferencing using webcam running in real-time for inferencing. The program is able to classify the image by using OpenCV library and using Openvino as an optimizer to increase the processing speed.

