Enumeration of bacterial colonies on petri dishes

Developed for an American multinational conglomerate, a leader in offering innovative food safety solutions

**Objective**
- Detect and count bacterial colonies of varied types of petri dish images
- Target Accuracy: 95% of human performance

**Outcome**
- Achieved more than 95% accuracy as compare to human performance
- Transfer learning: Trained model with limited dataset size (< 200 data samples for each petri dish media type)
- Deployment done on Single Board Computer having NVIDIA Pascal GPU - 256 CUDA Cores, to achieve the desired timing performance

**Tools & Technologies**
- Python, Tensorflow, OpenCV, NVIDIA Jetson TX

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