











above and significantly alleviates the problem of overlapping CFUs. Data augmentation, in particular rotations, is key to getting good performance with very few training examples. Slight improvements in the predictions quality could be achieved with a little more and better labelled data, although current results are already satisfactory to the operators. Another add-on could be setting-up a user-friendly interface embedded in our app so users can annotate new datasets. This would in turn facilitate the training and generalization to other species of bacteria. Finally, the areas of colonies are already computed and could later on be used to better estimate the actual quantity of bacteria in dishes.

## 4 Disclosure

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