

## Selected project

**FACUTLY NAME:** faculty of computer and information Helwan uni.

**SUBJECT :** Selected 2

**TEAM ID :** 31

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## Paper details

- **Author Name :** Anfal Bin Durayhim.
- **Paper Name :** Children's Arabic Handwriting Recognition via Deep Learning.
- **Publisher Name:** Anfal Bin Durayhim, Isra Al-Turaiki and Najwa Altwaijry.
- **Publish Year:** 29 January 2023.

- **Datasets Used:**

**First dataset:** Arabic Handwritten Characters

**dataset link:**

<https://www.kaggle.com/datasets/mohamed0hassan/arabic-handwritten-characters>

## Project Description Document

**Dataset used:** Malaria Cell Images Dataset

**Dataset link:**

<https://www.kaggle.com/datasets/iarunava/cell-images-for-detecting-malaria>

**Total number of samples:** 27,560 images

**The dimension of images:** height = 150   width = 150

**Number of class:** 3

**The label of classes:** Parasitized, Uninfected, cell images

**the ratio used for training, validation:**

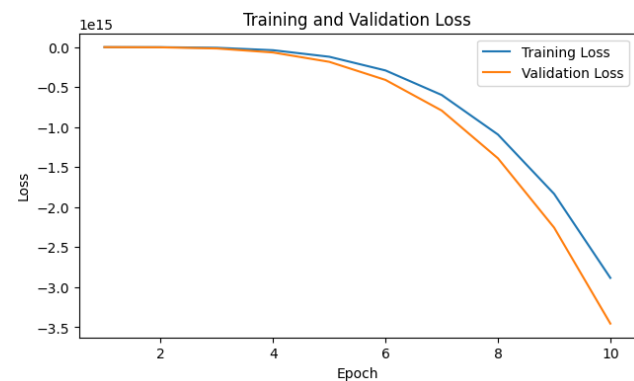
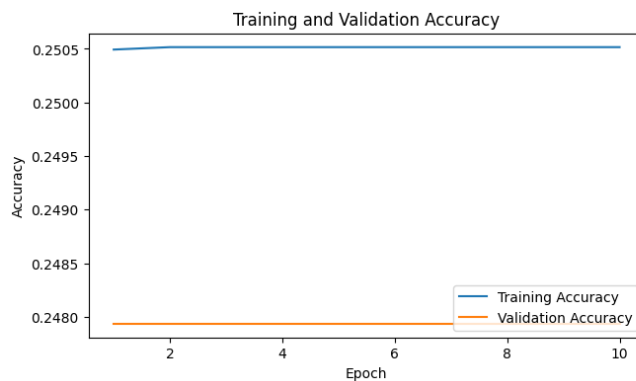
**Training:** 80%,      44093 images

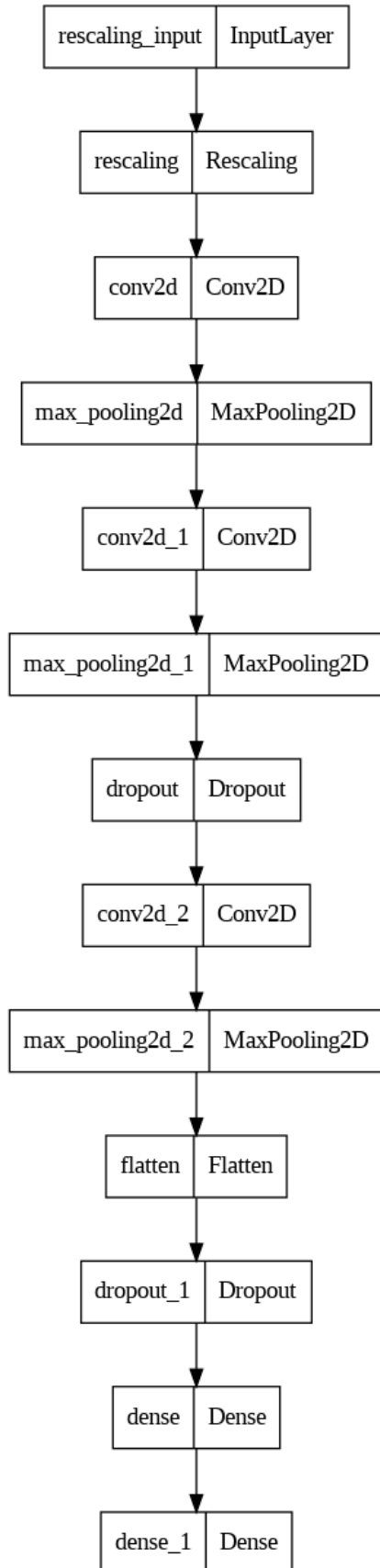
**Validation:** 20%,    11023 images

## hyperparameters used in the model:

```
model = Sequential([
    layers.Rescaling(1./255, input_shape=(img_height, img_width, 3)),
    layers.Conv2D(16, 3, padding='same', activation='relu'),
    layers.MaxPooling2D(),
    layers.Conv2D(32, 3, padding='same', activation='relu'),
    layers.MaxPooling2D(),
    layers.Dropout(0.2),
    layers.Conv2D(64, 3, padding='same', activation='relu'),
    layers.MaxPooling2D(),
    layers.Flatten(),
    layers.Dropout(0.2),
    layers.Dense(128, activation='relu'),
    layers.Dense(1, activation='sigmoid')
])
model.compile(optimizer='adam',
              loss='binary_crossentropy', metrics=['accuracy'])
```

## Results details:





## Block diagram:

