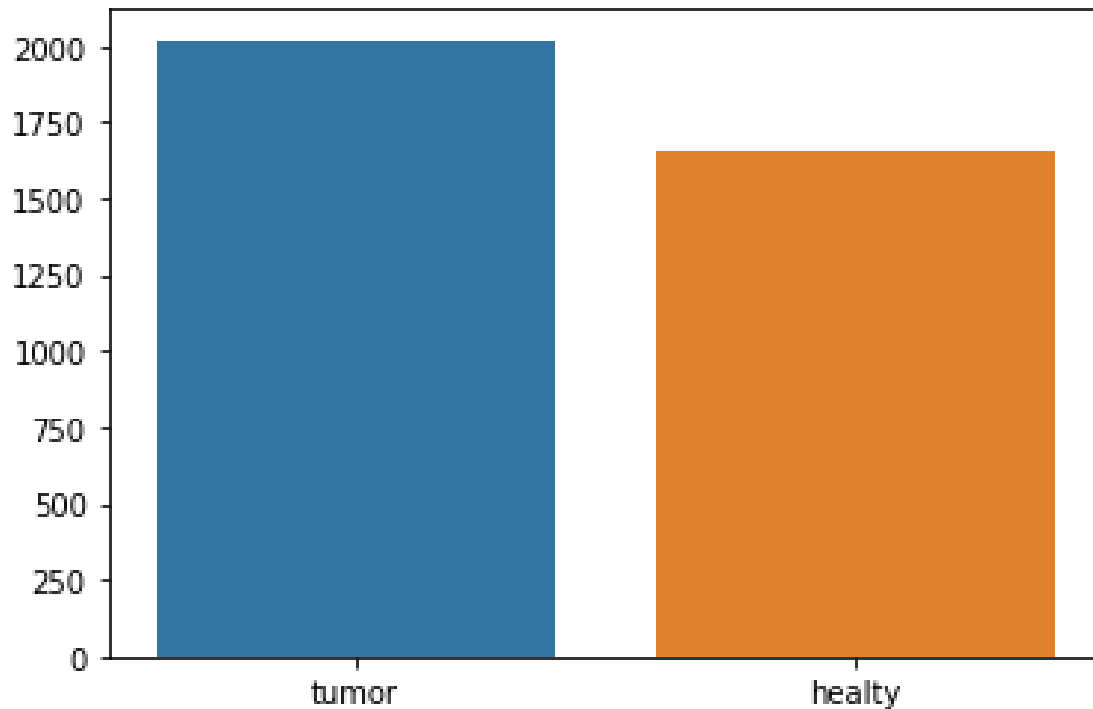


# Brain Tumor Detection

Kasia Jasielska, Karolina Mastalerz, Mateusz Nowakowski,  
Julia Wnuk

# Zbiór danych

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```
{'Brain Tumor': 0, 'Healthy': 1}
```

```
label  
Tumor      2823  
No tumor    2283  
dtype: int64
```

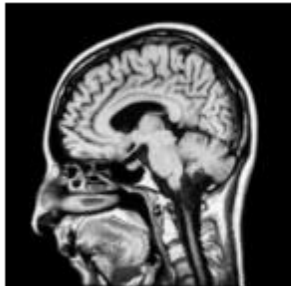


# Zbiór danych

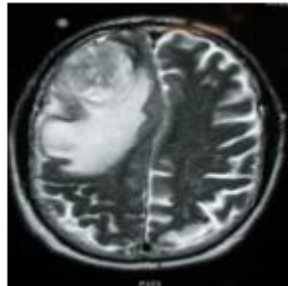
Tumor



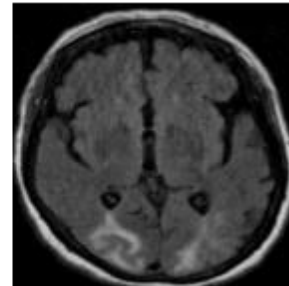
No tumor



Tumor



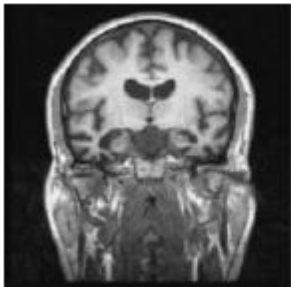
No tumor



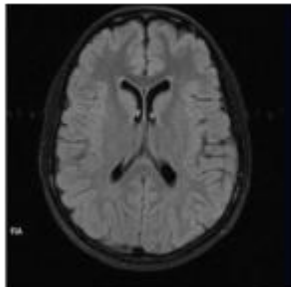
Tumor



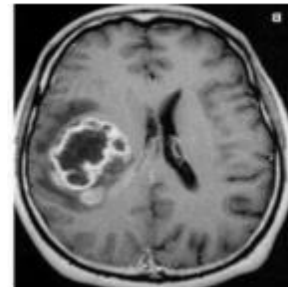
No tumor



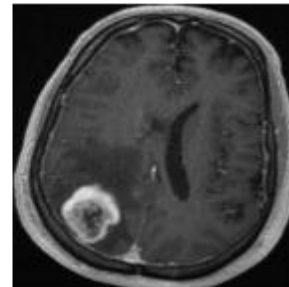
No tumor



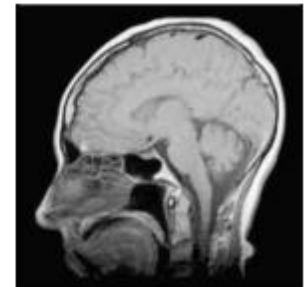
Tumor



Tumor



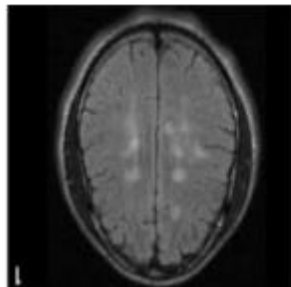
No tumor



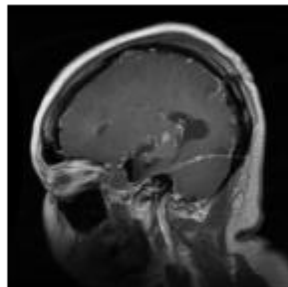
Tumor



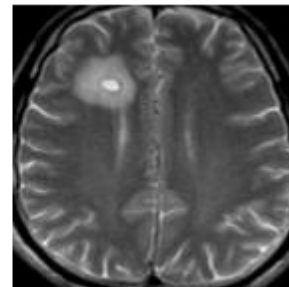
No tumor



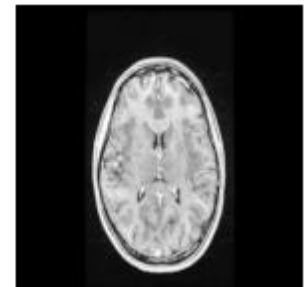
Tumor



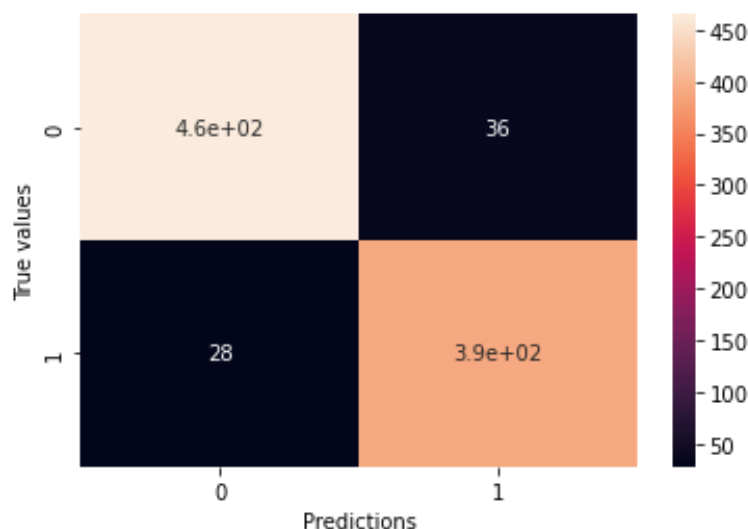
Tumor



No tumor



# Transfer learning model



Model: "mobilenet\_simple"

| Layer (type)                                      | Output Shape       | Param # |
|---|--------------------|---------|
| mobilenetv2_1.00_224 (Function)                   | (None, 7, 7, 1280) | 2257984 |
| global_average_pooling2d (GlobalAveragePooling2D) | (None, 1280)       | 0       |
| dense (Dense)                                     | (None, 1)          | 1281    |

Total params: 2,259,265

Trainable params: 1,281

Non-trainable params: 2,257,984

|              | precision | recall | f1-score | support |
|--------------|-----------|--------|----------|---------|
| Brain Tumor  | 0.94      | 0.93   | 0.94     | 501     |
| Healthy      | 0.92      | 0.93   | 0.92     | 419     |
| accuracy     |           |        | 0.93     | 920     |
| macro avg    | 0.93      | 0.93   | 0.93     | 920     |
| weighted avg | 0.93      | 0.93   | 0.93     | 920     |