layout: post
title: "Image convolutions"
date: 2019-04-20
excerpt: "Convolutions"
tag:

- sample post
- post
- images

comments: true

[Motivation](#)


```
[[0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1]]
```

```
[[0.1]
 [0.1]
 [0.1]
 [0.1]
 [0.1]
 [0.1]
 [0.1]
 [0.1]
 [0.1]
 [0.1]]
```

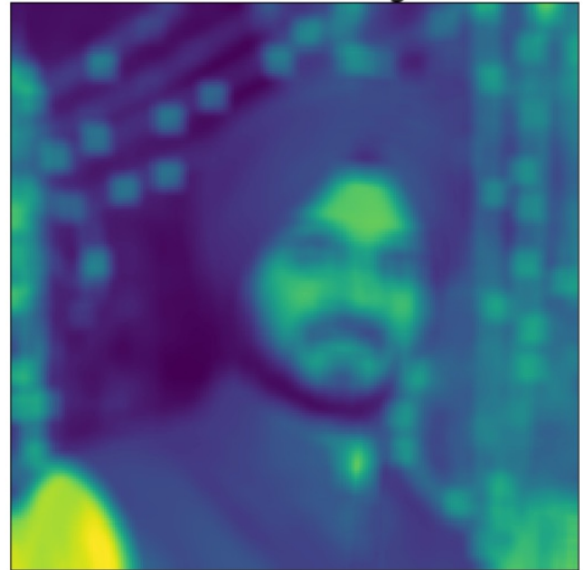| Original	After Filtering


```
[[0. 0. 0. 0. 0.]
 [0. 0. 0. 0. 0.]
 [0. 0. 1. 0. 0.]
 [0. 0. 0. 0. 0.]
 [0. 0. 0. 0. 0.]]
```

Original

After Filtering


```
array([[0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01],
       [0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01],
       [0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01],
       [0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01],
       [0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01],
       [0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01],
       [0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01],
       [0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01],
       [0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01],
       [0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01, 0.01]])
```

Original

After Filtering


```
[[-0.125 -0.125 -0.125]
 [-0.125  1.    -0.125]
 [-0.125 -0.125 -0.125]]
```

The code is available on my GitHub repository: GitHub Repository

Reference

Reference