Difference Operator - USE

AUGUSTO MARTINS – 01656520
2018S - ADVANCED TOPICS IN PARALLEL COMPUTING
UNIVERSITY OF VIENNA





Difference Operator is an edge detector

Difference Operator

- The operator performs the difference between a pixel and its surroundings.
- The maximum absolute difference in the 3x3 patch is the new value.

```
1 2 3
4 5 6
7 8 9
```

```
max of {
    | 5 - 1 | | 5 - 2 | | 5 - 3 |
    | 5 - 4 | | 5 - 6 | | 5 - 7 |
    | 5 - 8 | | 5 - 9 |
} = 4
```

Use Cases

It is a fundamental tool in image processing and computer vision.

Feature detection and feature extraction.