# With Measure for Horizontal Lines, Find Line Direction

**A second 3×3 filter detects horizontal lines.**

By combining the two results,
- we **obtain line strength**
- **and** line **direction** at each pixel.

| -1 | -2 | -1 |
|----|----|----|
| 0  | 0  | 0  |
| 1  | 2  | 1  |

horizontal edge filter

| -1 | 0 | 1 |
|----|---|---|
| -2 | 0 | 2 |
| -1 | 0 | 1 |

vertical edge filter