Program with Images: Pitfalls

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Tools of the Trade

- OpenCV is a widely used, open source computer vision library maintained by Intel

- Provides libraries for image I/O, movie I/O and camera capture

- Industrial strength computer vision and image processing implementations

- GUI toolkit

Tools of the Trade

- Irfanview is a freely available image viewer
- Good at batch processing of image frames

Common Gotcha's

- Sometimes the mapping from a weird looking image to the actual error is not obvious

Common Gotcha's
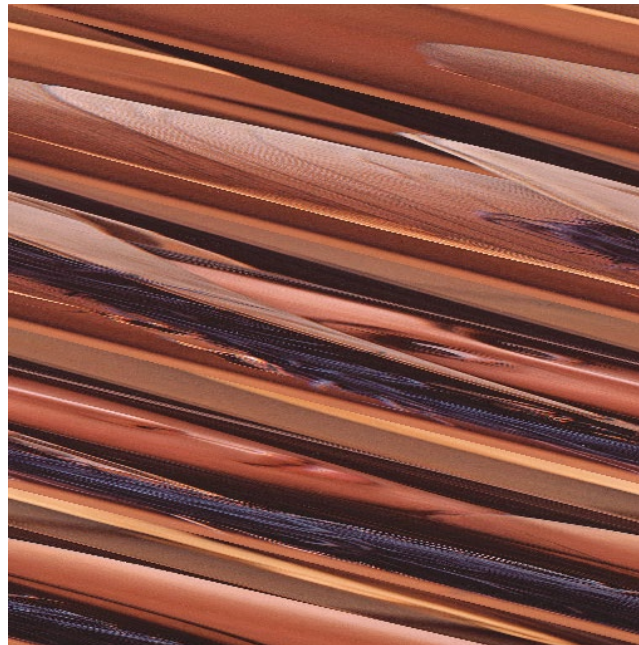# Color Order

- RGB vs. BGR

Common Gotcha's
Wrong Width

Incorrect width can result in an image with strong diagonal structure
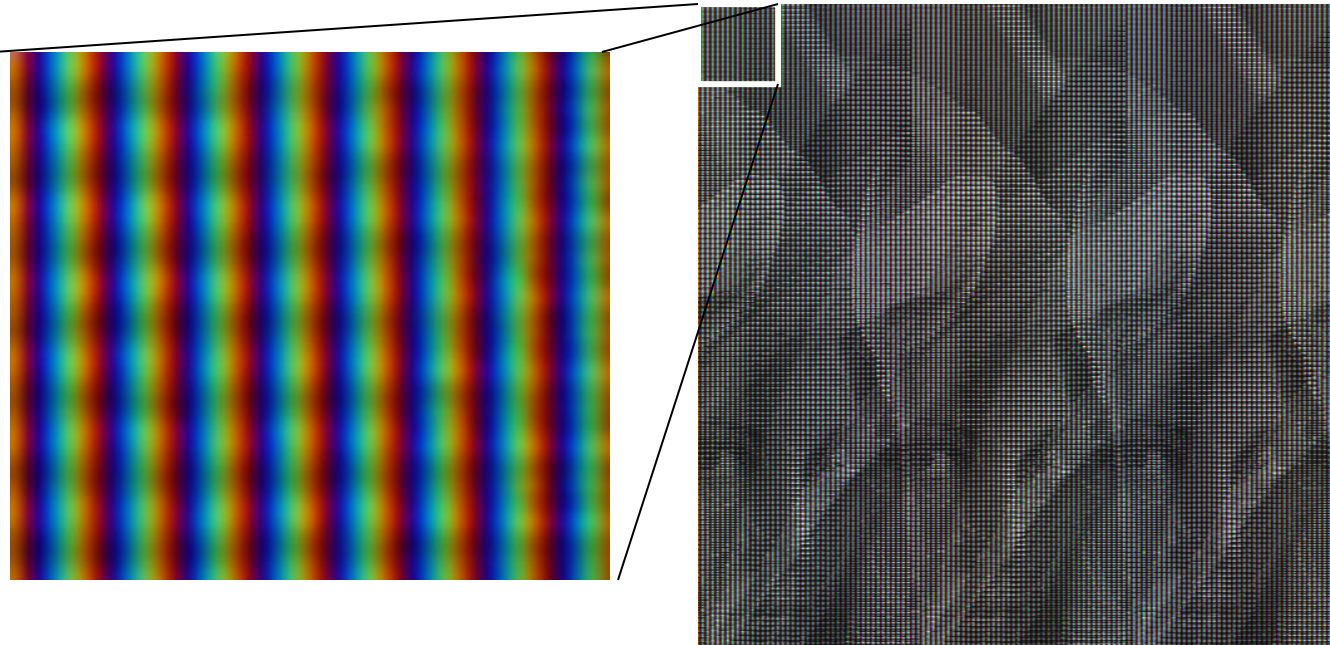
Actual width: 512

This image width: 508

Common Gotcha's
Wrong Color Depth

- Mismatched color depth can result in an image with a rainbow effect

Common Gotcha's
Windows line endings

- On Windows, it is critically important to open image files in binary mode.

- Otherwise,windows helpfully strips out any bytes with value 'r' (20).