24-678: Computer Vision for Engineers
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PS1 Report
Due: Sep 16 2023

This file contains the following:
PS1-2 Read color images, apply thresholding, and change colors

- grayscale image files: “circuit_grayscale.png” and “crack_grayscale.png”
- binary image files: “circuit_binary.png” and “crack_binary.png”
- output image files: “circuit_output.png” and “crack_output.png”
- readme.txt
- source code file(s) (attached to the end)

PS1-3 Gamma correction

- gamma-corrected images: “smiley_gcorrected.jpg” and “carnival_gcorrected.jpg”
- readme.txt includes
- source code file(s) (attached to the end)

PS1-2 Grayscale

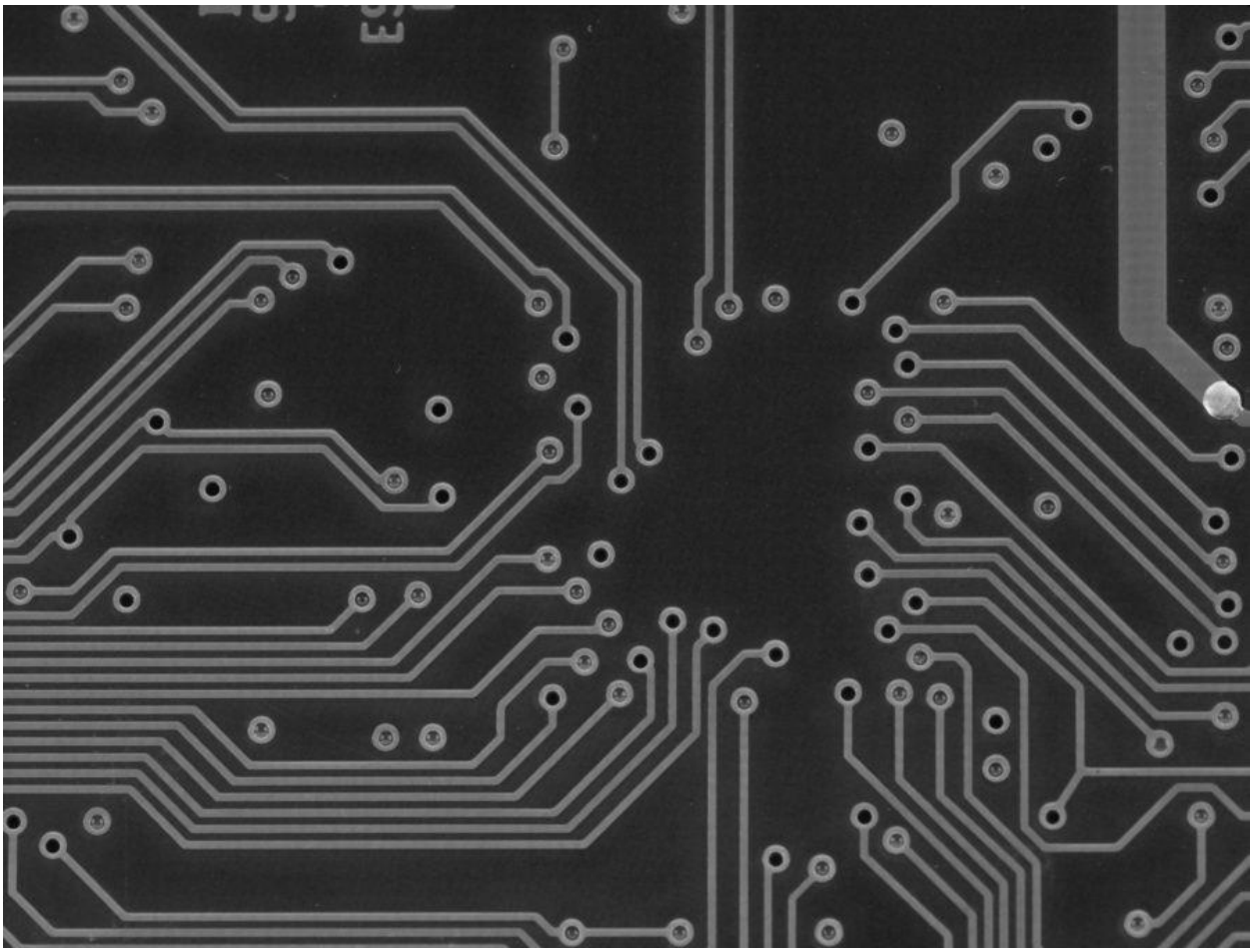

Figure 1. Circuit grayscale image.

PS1-2 Grayscale

Figure 2. Crack grayscale image.

PS1-2 Binary

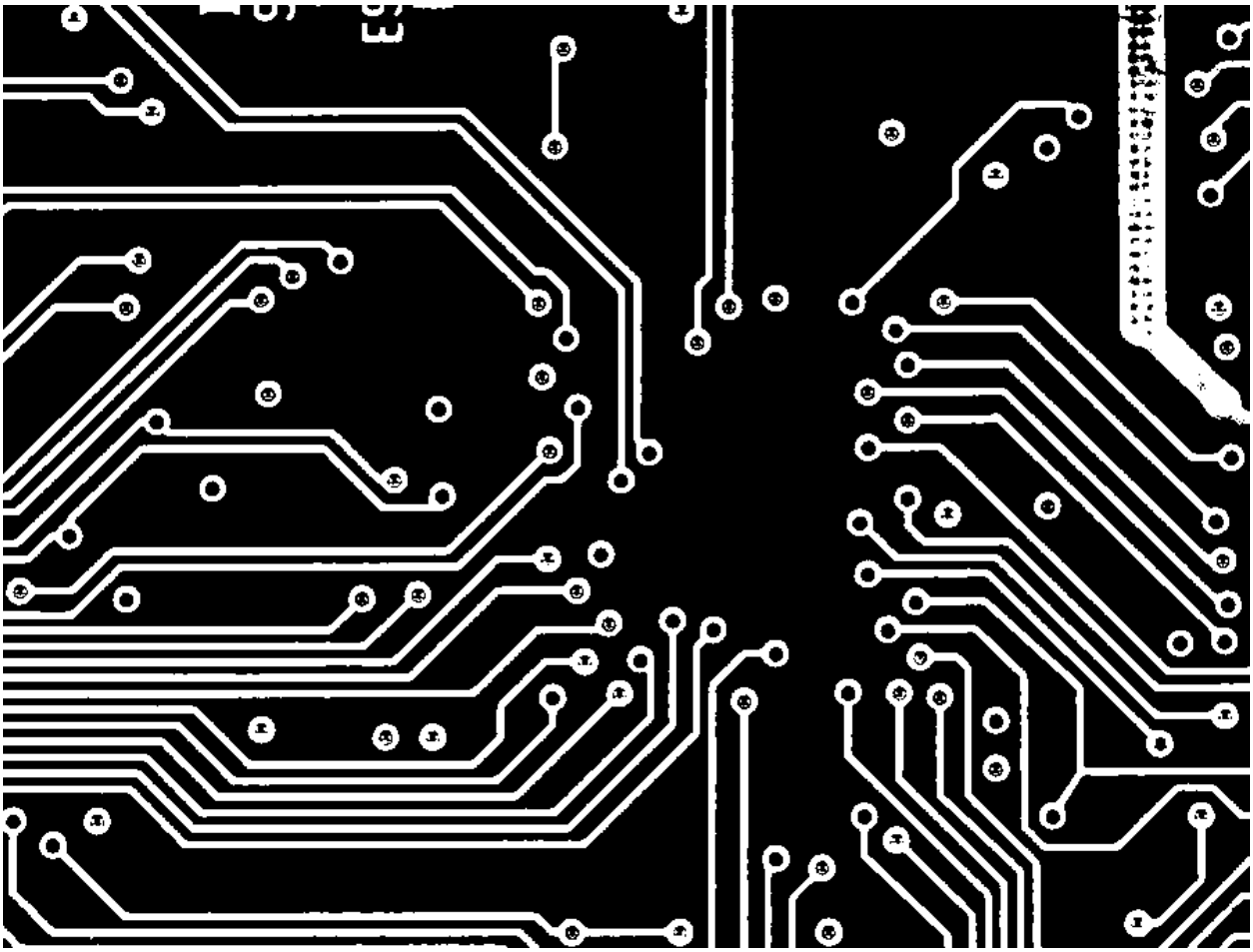

Figure 3. Circuit binary image.

PS1-2 Binary

Figure 4. Crack binary image.

PS1-2 Output

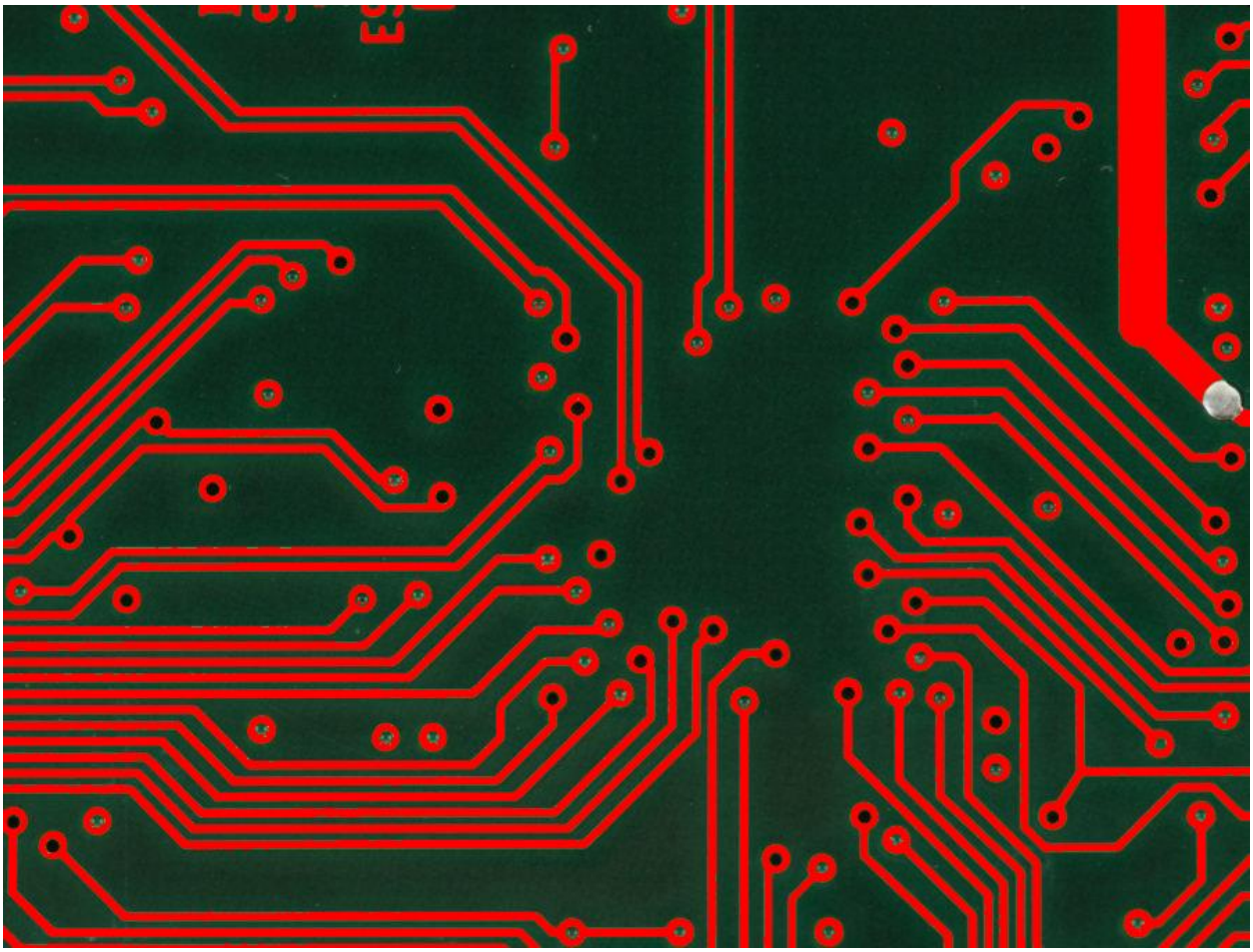

Figure 5. Circuit output color image.

PS1-2 Output

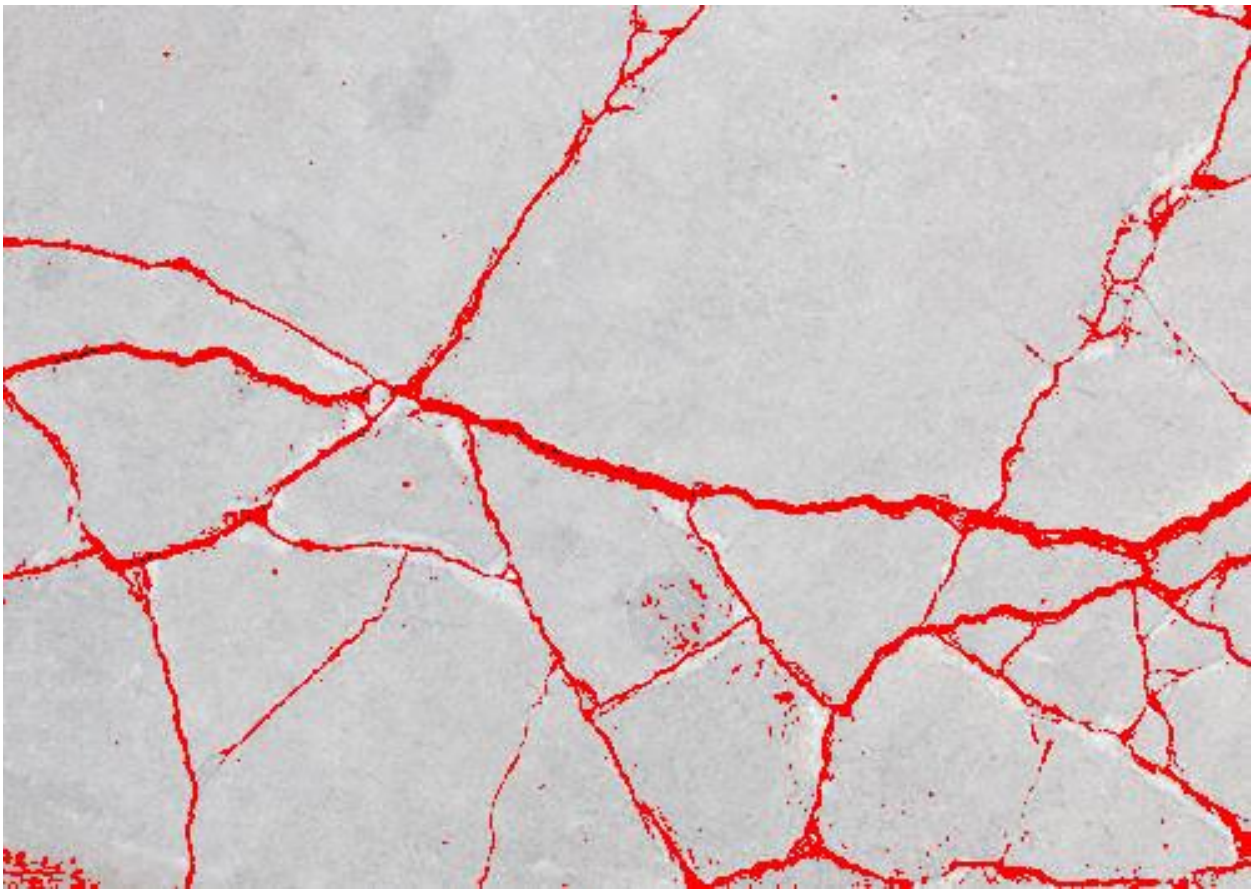

Figure 6. Crack output color image.

PS1-2 Read me text file

```
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PS1-2 Read color images, apply thresholding, and change colors

Operating system: macOS Ventura 13.5.2
IDE you used to write and run your code: PyCharm 2023.1.4 (Community
Edition)
The number of hours you spent to finish this problem: 12 hours.
```

PS1-3 Gamma correction

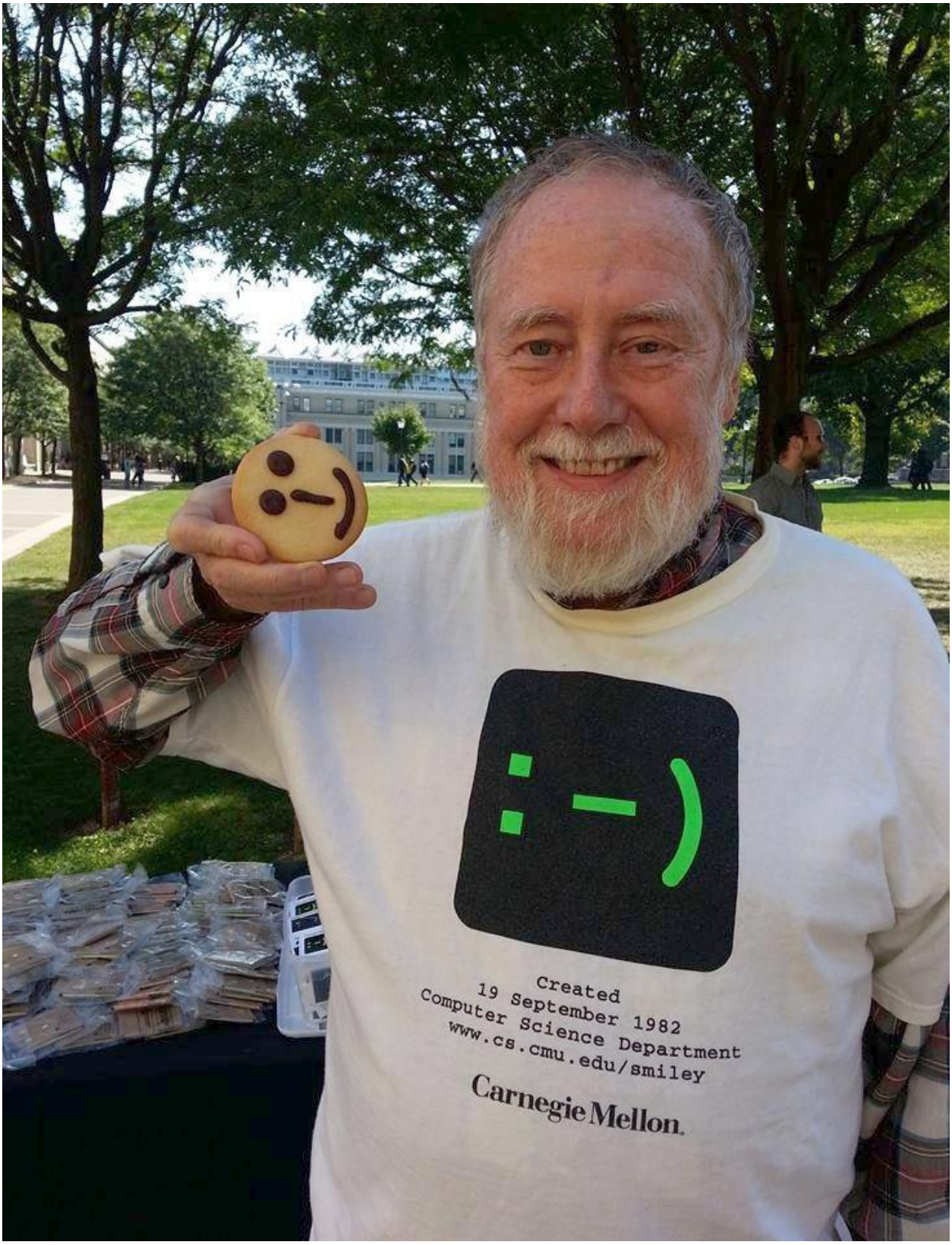

Figure 7. Smiley with gamma correction.

PS1-3 Gamma correction

Figure 8. Carnival with gamma correction.

PS1-3 Read me text file

```
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PS1-3 Gamma correction

Operating system: macOS Ventura 13.5.2
IDE you used to write and run your code: PyCharm 2023.1.4 (Community
Edition)
The number of hours you spent to finish this problem: 5 hours.
```