

# The Art of Randomness

## Randomized Algorithms in the Real World

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Errata updated to print 1

| Page | Error   | Correction  | Print corrected |
|------|---|---|-----------------|
| 64   | <pre data-bbox="174 508 1012 699">&gt;&gt;&gt; d = np.array(Image.open("apples.png")) &gt;&gt;&gt; t = d[:, :, 0] &gt;&gt;&gt; d[:, :, 0] = d[:, :, 1] &gt;&gt;&gt; d[:, :, 1] = t &gt;&gt;&gt; im = Image.fromarray(d) &gt;&gt;&gt; im.save("bad_apples.png")</pre> <p data-bbox="174 721 989 802">The first line rereads apples.png and then immediately changes it into a NumPy array. We'll use this idiom consistently.<br/>The next three lines swap the red and <b>green</b> color channels.</p> | <pre data-bbox="1041 508 1879 699">&gt;&gt;&gt; d = np.array(Image.open("apples.png")) &gt;&gt;&gt; t = d[:, :, 0].copy() &gt;&gt;&gt; d[:, :, 0] = d[:, :, 2].copy() &gt;&gt;&gt; d[:, :, 2] = t &gt;&gt;&gt; im = Image.fromarray(d) &gt;&gt;&gt; im.save("bad_apples.png")</pre> <p data-bbox="1041 721 1856 802">The first line rereads apples.png and then immediately changes it into a NumPy array. We'll use this idiom consistently.<br/>The next three lines swap the red and <b>blue</b> color channels.</p> | Pending         |