

pGPSFalsifier.py – Read Me

- The pGPSFalsifier program modifies six values of an existing image file, latitudeRef, latitude, longitudeRef, longitude from GPS data and two timestamps from EXIF data.
- If the image has EXIF data but no GPS info tag, it creates the GPS dictionary from scratch with the false information.
- If the image already has a GPS info tag, it replaces its latitude, longitude, and time values with the falsified ones, leaving the other entries as-is.
- The program takes two command line arguments -f name of the original file and -n name of the new file with false information.
- In the following example Cat.jpg is the name of the original file and CatCopy.jpg is the name I want to give to the new file with false information.

Example: C:\Users\Anjum Shams\Desktop\Project\Program>py pGPSFalsifier.py -f Cat.jpg -n CatCopy.jpg

- The output on the command line shows the original data and the modified data or if there is no EXIF data on the file it prints out a message that there is no EXIF data on the image.

```
C:\Users\Anjum Shams\Desktop\Project\Program>py pGPSFalsifier.py -f Cat.jpg -n CatCopy.jpg
Original data:
b'2008:08:05 20:59:32' b'2008:08:05 20:59:32' b'N' ((59, 1), (55, 1), (37417, 1285)) b'E' ((10, 1), (41, 1), (55324, 1253))

Modified data:
b'2010:7:11 14:45:17' b'2010:7:11 14:45:17' b'N' ((30, 1), (1, 1), (48, 1)) b'E' ((61, 1), (27, 1), (29, 1))

C:\Users\Anjum Shams\Desktop\Project\Program>py pGPSFalsifier.py -f Turtle.jpg -n TurtleCopy.jpg
Original data:
b'2008:05:08 16:55:58' b'2008:05:08 16:55:58' b'N' ((419430400, 16777216), (335544320, 16777216), (306016420, 16777216))
b'E' ((570425344, 16777216), (738197504, 16777216), (382480259, 16777216))

Modified data:
b'2016:8:3 23:45:7' b'2016:8:3 23:45:7' b'N' ((82, 1), (52, 1), (43, 1)) b'W' ((113, 1), (31, 1), (52, 1))

C:\Users\Anjum Shams\Desktop\Project\Program>py pGPSFalsifier.py -f cat-on-roof.jpg -n cat-on-roofCopy.jpg
No EXIF data on the image.

C:\Users\Anjum Shams\Desktop\Project\Program>
```