Shraeyas / Drone-Image-Stitching

Image Stitching tool for UAV captured Images

-o- 26 commits	② 2 branches	🗇 0 packages	♦ 0 releases		1 contributor	
Branch: master ▼ New pull request			Create new file	Upload files	Find file	Clone or download ▼
TT Shraeyas update readme La					commit 85e	7db0 on May 13, 2019
☐ .gitignore		Readme				2 years ago
■ AlphaBlend.py		Readme				2 years ago
☐ CombinePair.py		Readme				2 years ago
Combiner.py		Readme				2 years ago
■ Dataset.py		Readme				2 years ago
ExifData.py		Readme				2 years ago
☐ ImageMosaic.py		Readme				2 years ago
		Readme				2 years ago
Perspective.py		Readme				2 years ago
		update readme				11 months ago
		Readme				2 years ago
☐ geometry.py		Readme				2 years ago
requirements.txt		Readme				2 years ago
utilities.py		Readme				2 years ago

☐ README.md

Initial fork from https://github.com/alexhagiopol/orthomosaic

Tata Innoverse - Solverhunter Image Stitching software built Upon python using OpenCV

Test Dataset: https://drive.google.com/open?id=1J68p_I2HTYJKXyJY2Y3sjvmwu1CA6Yvh Results: https://drive.google.com/open?id=14KnZ6C9RpAOMN2BmqXRex8UJ7mWVfP4g

Requirements

- 1. Python >= 3.5
- 2. pip

Set Up

- 1. Firstly download the project zip file and extract its contents.
- 2. Open Command Prompt (with administrative privileges) and navigate to the project folder.
- 3. Run the following in the Command Prompt (or Terminal on Linux) to install all the required dependencies pip install -r requirements.txt

Run the Project

- 1. Open the command Prompt (or Terminal on Linux) in the Project folder.
- 2. Place the test dataset images in datasets/images folder
- 3. Run the following in the Command Prompt (or Terminal) python ImageMosaic.py
- 4. Final Image is saved as finalResult.png inside results folder.

Minimum Specifications

- 1. 4GB RAM
- 2. At least 2GB Free Disk Space For storing temporary files

Our Test Bench

- 1. 4GB RAM with Core i5 3.6 ghz (Desktop) ~ 10 mins
- 2. 8GB RAM with Core i5 2.6 ghz (Laptop) ~ 20 mins

Note

- 1. The software is not compatible with Python 2.
- 2. All the images must have EXIF data and XMP data with them. (Mostly drone captured images already have these as metadata.)

https://github.com/Shraeyas/Drone-Image-Stitching