Colour - Demosaicing Documentation

Release 0.1.1

Colour Developers

Mar 24, 2019

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A Python package implementing various CFA (Colour Filter Array) demosaicing algorithms and related utilities.

It is open source and freely available under the New BSD License terms.

CHAPTER 1

Features

The following CFA (Colour Filter Array) demosaicing algorithms are implemented:

- Bilinear
- Malvar (2004)
- DDFAPD - Menon (2007)

CHAPTER 2

Installation

Because of their size, the resources dependencies needed to run the various examples and unit tests are not provided within the Pypi package. They are separately available as Git Submodules when cloning the repository.

2.1 Primary Dependencies

Colour - Demosaicing requires various dependencies in order to run:

- Python 2.7 or Python 3.5
- NumPy
- OpenImageIO

2.2 Pypi

Once the dependencies satisfied, **Colour - Demosaicing** can be installed from the Python Package Index by issuing this command in a shell:

```
pip install colour-demosaicing
```

The tests suite dependencies are installed as follows:

```
pip install 'colour-demosaicing[tests]'
```

The documentation building dependencies are installed as follows:

```
pip install 'colour-demosaicing[docs]'
```

CHAPTER 3

Usage

3.1 API

The main reference for Colour - Demosaicing is the complete Sphinx API Reference:

- API Reference

3.2 Examples

Various usage examples are available from the examples directory.

CHAPTER 4

Contributing

If you would like to contribute to Colour - Demosaicing, please refer to the following Contributing guide for Colour.

CHAPTER 5

Bibliography

The bibliography is available in the repository in either BibTeX format or reStructuredText.

CHAPTER 6

About

Colour - Demosaicing by Colour Developers

http://github.com/colour-science/colour-demosaicing