





# About The Project

Thorlabs Scientific Imaging (TSI) microscope image alignment machine learning system.

[\(back to top\)](#)

## Built With

-  PYTHON
-  TENSORFLOW
-  OPENCV
- MATPLOTLIB
-  NUMPY

[\(back to top\)](#)

# Getting Started

## Prerequisites

- Python 3.8 or greater
- Git

## Installation

1. Clone the repo

```
git clone https://ThorlabsSpectralWorks@dev.azure.com/ThorlabsSpectralWorks/tsi-image-recognition/_git/tsi-image-recognition
```

2. Navigate into the repo folder and pull the latest code from the development branch

```
$ git pull origin dev
```

3. Create a new virtual Python environment called `env`

```
$ python -m venv env
```

4. Activate the virtual environment.

- Windows:

```
$ ./env/Scripts/activate
```

- Mac/Linux:

```
$ source ./env/bin/activate
```

5. Install the required dependencies.

```
$ python -m pip install -r requirements.txt
```

6. Deactivate the virtual Python environment when finished. (Windows and Mac/Linux)

```
$ deactivate
```

[\(back to top\)](#)

## License

Distributed under the MIT License. See [LICENSE.txt](#) for more information.

[\(back to top\)](#)

## Contact

Tony Bautista - [jbautista@thorlabs.com](mailto:jbautista@thorlabs.com)

Heath Smith - [hsmith@thorlabs.com](mailto:hsmith@thorlabs.com)

Project Link: [https://dev.azure.com/ThorlabsSpectralWorks/\\_git/tsi-image-recognition](https://dev.azure.com/ThorlabsSpectralWorks/_git/tsi-image-recognition)

[\(back to top\)](#)