# scikit-surgery Documentation

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#### Contents

1	Installing	3
2	Developing	5
3	Licensing and copyright	7
4	Acknowledgements	9



SciKit-Surgery is part of the SciKit-Surgery image guided surgery software project, developed at the Wellcome EPSRC Centre for Interventional and Surgical Sciences, part of University College London (UCL).

scikit-surgery is a meta-package that will install several other packages:

- scikit-surgerycore
- scikit-surgeryimage
- scikit-surgeryvtk
- scikit-surgeryutils

## CHAPTER 1

### Installing

#### You can install the latest version from PyPI:

pip install scikit-surgery

### CHAPTER 2

#### Developing

#### 2.1 Cloning

You can clone the repository using the following command:

```
git clone https://github.com/UCL/scikit-surgery
```

#### 2.2 Running the tests

You can run the unit tests by installing and running tox:

```
pip install tox tox
```

#### 2.3 Encountering Problems?

Please check list of common issues.

#### 2.4 Contributing

Please see the contributing guidelines.

#### 2.5 Useful links

Source code repository

• Documentation

# CHAPTER $\mathbf{3}$

### Licensing and copyright

Copyright 2018 University College London. scikit-surgery is released under the BSD-3 license. Please see the license file for details.

### CHAPTER 4

#### Acknowledgements

Supported by Wellcome and EPSRC.

#### 4.1 Requirements for scikit-surgery

This is the software requirements file for scikit-surgery, part of the SNAPPY project. The requirements listed below should define what scikit-surgery does. Each requirement can be matched to a unit test that checks whether the requirement is met.

#### 4.1.1 Requirements

ID	Description	Unit test
0000	Module has a help page	
0001	Functions are documented	
0002	Package has a version number	

#### 4.2 Get started with PyCharm

PyCharm is a popular python editor. This is a quickstart guide setting up PyCharm for developing sksurgery. This assumes you have PyCharm installed and configured to support virtual environments.

- 1. Start PyCharm
- 2. Select File > Open
- 3. Select the project's folder
- 4. Open in a new window
- 5. Open Preferences

- 6. Click on Project: [YourProject] and select Project Interpreter
- 7. At the right of the Project Interpreterm, click the cog
- 8. Select Add Local...
- 9. Select Virtual Environment
- 10. Choose a location for your virtual environment (for example, [YourHome-Folder]/VirtualEnvs/[YourProjectName])
- 11. Select a base interpreter (usually the latest version of Python 3).
- 12. Recommended settings: Do not inherit global site-packages, and do not make available to all projects.
- 13. Click OK
- 14. Click on Terminal
- 15. pip install tox
- 16. *tox*
- 17. Expand the project
- 18. Right-click on the Tests folder and choose "Run Unittests in tests". This will create a new configuration for running tests
- 19. Right-click on sksurgery and select Run sksurgery. This will create a new configuration for running the project.
- 20. Switch between the program and test configurations using the drop-down at the top of the screen, and the green arrow to run or the green bug to debug.
  - modindex
  - genindex
  - search