# Cardiovascular risk computed via Deep Learning (DL) on thoracic CT scans (Med3DResNet)

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#### How to run package for evaluation

Because the annotation tool requires a GUI, we will use a PyPI package and a separate virtualenv for dependencies. Docker does not natively support GUIs and workarounds are too elaborate for this simple package.

## Build steps (developers only):

- 1. Run commands to build a tarball and wheel
  - a. python3 -m pip install --user --upgrade setuptools
    wheel
  - b. python3 setup.py sdist bdist wheel

### Install steps:

- 1. Ensure Python>=3.6 is installed on your machine
- 2. Open a terminal and cd to a directory where you want to store the package
- 3. Download .zip from OneDrive with all data/pip packaged code and unzip
  - a. SEE GIVEN LINK
- 4. Setup a virtualenv for use with this project only
  - a. python3 -m venv acvproject
  - b. source acvproject/bin/activate
- 5. Install package using pip
  - a. pip install MED3DRESNET-1.0.tar.qz
- 6. Cd into ACVProject directory
- 7. Open README.md for project details and open the two PDFs in the documentation subfolder for a tutorial on using the annotation GUI and train/testing of the CNN.
- 8. Happy training!