# Numerical Analysis Team 2.2 Project Documentation

## About

Our project uses Python 3.5+ code and the following dependencies (please note that the project will not run with Python 2.7):

* numpy
* scipy
* sympy
* matplotlib

These dependencies gave us access to robust mathematical algorithms and data structures, but this unfortunately comes at a cost… Installation kind of sucks. Detailed instructions for installation will follow.

A few things to note; we have built the application to either run through a GUI interface, or you can call the algorithms directly if you’re comfortable using Python in this way. Instructions will also follow.

## Installation

### The easy way

The easy way simply installing Anaconda, a Python distribution for data science:

<https://www.continuum.io/downloads>

This will install Python 3.5, Numpy, Scipy, Sympy, and Matplotlib all for you. You can see what packages it will install here:

<https://docs.continuum.io/anaconda/pkg-docs>

### The hard way

We have placed the dependencies for Windows You’ll need Python 3.5 and, run the following commands in the install directory in the following order:

**If you’re on Windows**

pip install numpy-1.11.3+mkl-cp35-cp35m-win\_amd64.whl

pip install scipy-0.19.0-cp35-cp35m-win\_amd64.whl

pip install matplotlib-2.0.0-cp35-cp35m-win\_amd64.whl

pip install mpmath

pip install sympy

**If you’re on a Mac/Linux OS**

python setup.py install

If that still doesn’t work, reach out to one of us and we’ll try to help you get up and running.