Peer-review of assignment 4 for *INF3331-matan*

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1 Review

Code tested with

- Python 3.6.1 on macOS Sierra(version 10.12.6)

- Python 3.5.2 on Ubuntu Ubuntu 16.04.2 LTS

General feedback

This is a very good solution, well documented and everything we have tested is working. Very detailed and informative reports. Everything is easy to read, with good function names etc.

Assignment 4.1

All is working as expected, and the tests have meaningful names, all starting with test_. The code is very easy to read and also written in a pythonic way. No unnecessarily complicated parts. The usage of error threshold 10E-10 that you commented about is fine. The original assignment test had, as mentioned on Piazza by instructor, a bit too strict suggested threshold.

Assignment 4.2

Working as expected, passes test. Nice that you both use python docstring as well as comments. Easy enough to read, but you could use more descriptive variable names; "integral" instead of "I". Good plot.

```python
def integrate(f, a, b, N):
    """
    Integration method that does not use any python modules (numpy)
    """
    n = (b-a)/float(N) #Interval length
    I = 0.0 # Will be value of integrated function
    m = 0 # Counter
    for i in range(1, int(N)):
        m += 1
        I += f(a + i*n)*n
    I += f(b)*n
    return I
```

The only thing i see is that the "m" counter here is not doing anything.

Assignment 4.3

Working as expected and documentation where its needed. Program is easy to read. Numpy vectorization is used effectively. Good report with informative explanations. Nice that you made a dedicated testing.py program.

Assignment 4.4

Working as expected and documentation where its needed. Easy to read. Again a well written report with elaborate explanations. Good that you explained that vectorized functions don't work in numba. In regards to numba performance: Numba loses some initial lead by having to compile methods before they are ran, which are then ready the next time.

Assignment 4.6

Working as expected and documentation where its needed. Well explained report, also good that you comment on the accuracy of your N values.

Assignment 4.7

Packaging is done correctly

Assignment 4.8

Bonus contest not done.