

# Python Optimization Setup

Summer 2023

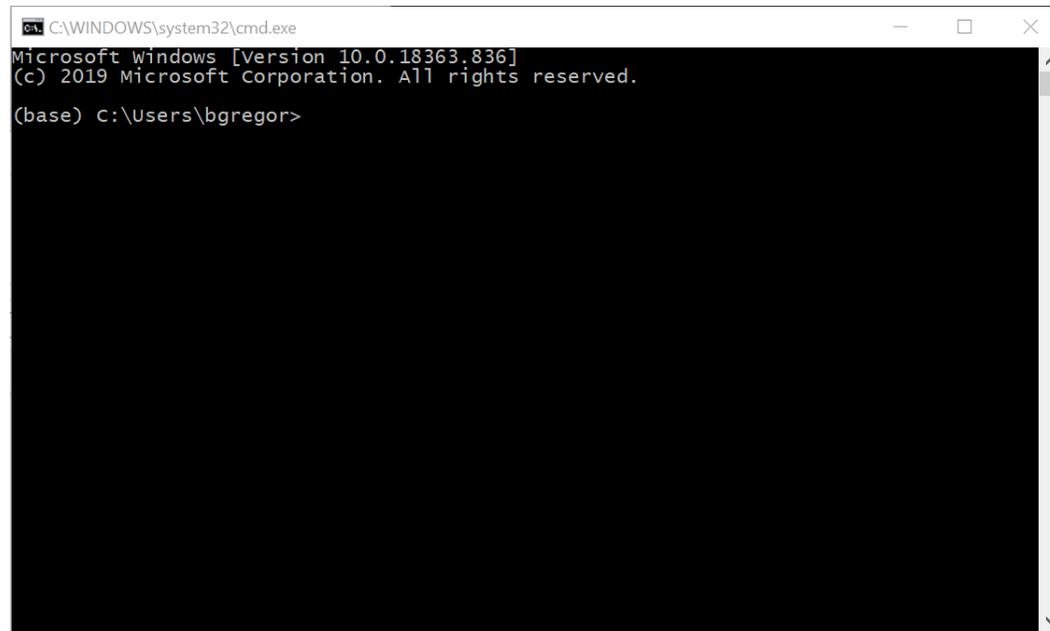
Research Computing Services

IS & T



Mac: click Terminal Prompt

The screenshot shows the Anaconda Navigator application window. The title bar reads 'Anaconda Navigator'. Below the title bar is a menu bar with 'File' and 'Help'. The main header features the 'ANACONDA.NAVIGATOR' logo and a 'Connect' button. On the left side, there is a sidebar with navigation options: 'Home', 'Environments', 'Learning', and 'Community'. The main content area displays a grid of application tiles under the heading 'All applications on base (root) Channels'. The tiles include: DataSpell (with an 'Install' button), CMD.exe Prompt (with a 'Launch' button and a red arrow pointing to it), JupyterLab (with a 'Launch' button), Jupyter Notebook (with a 'Launch' button), Powershell Prompt (with a 'Launch' button), and PyCharm Community (with a 'Launch' button). A red text annotation 'Windows: click CMD.exe Prompt' is positioned above the grid, with a red arrow pointing to the 'Launch' button of the 'CMD.exe Prompt' tile.

A screenshot of a Windows command prompt window. The title bar reads "C:\WINDOWS\system32\cmd.exe". The window content shows the following text: "Microsoft Windows [Version 10.0.18363.836]  
(c) 2019 Microsoft Corporation. All rights reserved.  
(base) c:\Users\bgregor>". The rest of the window is black with a white cursor at the end of the prompt.

Example of the  
Windows terminal

In the terminal or command window that opens enter the following commands:

```
conda install -y line_profiler memory_profiler  
pip install scalene
```

This will install some Python libraries that we will use during the tutorial.

# If you're using the SCC

- Get yourself a Desktop environment in OnDemand with this module loaded:

```
python3/3.10.12
```

- In a terminal you can download the files for the tutorial with:

```
/net/scc1/scratch/setup_py_opt.sh
```

# File Download

- Slides and sample code:
- <http://rcs.bu.edu/examples/python/tutorials/PyOpt/>
  
- Download the file: **Python\_Optimization\_v0.7\_files.zip**
  - Windows: Right-click, choose Extract All
  - Mac: double-click