

# Software Hardware List

| Chapter number | Software required (With version) | Free/Proprietary | If proprietary, can code testing be performed using a trial version | If proprietary, then cost of the software | Download links to the software   | Hardware specifications       | OS required              |
|----------------|----------------------------------|------------------|---|---|--|-------------------------------|--------------------------|
| 1 - 11         | Anaconda 5 (Python 2.7 version)  | Free             | N/A   | N/A                                       | <a href="https://www.anaconda.com/download/">https://www.anaconda.com/download/</a>  | 64-bit Intel/AMD PC, 8 GB RAM | Windows 10, Ubuntu 16.04 |
| 2-11           | CUDA 9.2                         | Free             | N/A   | N/A                                       | <a href="https://developer.nvidia.com/cuda-92-download-archive">https://developer.nvidia.com/cuda-92-download-archive</a>  | Nvidia 1050 GPU or higher     | Windows 10, Ubuntu 16.04 |
| 2-11           | PyCUDA (latest)                  | Free             | N/A   | N/A                                       | <a href="https://github.com/inducer/pycuda">https://github.com/inducer/pycuda</a><br><a href="https://www.lfd.uci.edu/~gohlke/pythonlibs/#pycuda">https://www.lfd.uci.edu/~gohlke/pythonlibs/#pycuda</a> | Nvidia 1050 GPU or higher     | Windows 10, Ubuntu 16.04 |
| 7              | Scikit-CUDA (latest)             | Free             | N/A   | N/A                                       | <a href="https://github.com/lebedov/scikit-cuda">https://github.com/lebedov/scikit-cuda</a>  | Nvidia 1050 GPU or higher     | Windows 10, Ubuntu 16.04 |
| 2-11           | Visual Studio Community 2015     | Free             | N/A   | N/A                                       | <a href="https://visualstudio.microsoft.com/vs/older-downloads/">https://visualstudio.microsoft.com/vs/older-downloads/</a>  | 64-bit Intel/AMD PC, 8 GB RAM | Windows 10               |

## Detailed installation steps (software-wise)

Please see chapter 2 for explicit setup instructions for both Windows 10 and Linux. I have used Anaconda Python 5 distribution for Python 2.7 and CUDA 9.2 to test all examples in this text, although CUDA 10.x or any later version should also work. I have tested all code examples in this book under both Windows 10 (using Visual Studio Community 2015) and Ubuntu 16.04.