

# **IS430 – Foundations of Information Processing**

## **Instructions for Tool Versions, Installation, and Virtual Environments**

### **Spring 2025**

### **Instructions**

#### **Overview**

While setting up your computing environment, you will need to install several software products and do some configuration. I have provided tutorial videos for you to follow when doing those activities. In the videos, I install the version of these tools that we were using when I made the recording. Since you may be taking this course in a later semester, you will need to know which versions to install. This document provides that information.

#### **Installing Anaconda**

Follow my tutorial video to install the latest version of Anaconda. If there is any reason in the current semester why you should not install the latest available version, I will provide a warning and instructions on finding the correct version here:

- No problems expected. Install the latest available version.

#### **Updating Anaconda**

Your copy of Anaconda may need to be updated. Even when we install Anaconda for the first time, we immediately try to update it. Often, if students are having software problems later in the semester, I will send them back to these instructions and the related tutorial so that they can update their copy of Anaconda. To update Anaconda, follow my tutorial video.

#### **Creating an Anaconda Virtual Environment**

Follow my tutorial video to create the Anaconda virtual environment that you will be using for this course. It should have the following name:

- e4\_trainor\_python\_course

Please do not use an alternative name for your virtual environment. Using this exact name makes it easier for us to grade your coding assignment submissions.

In the current semester, these are the packages that you should include in the virtual environment:

- python (3.11)
- jupyter (the Jupyter metapackage)
- numpy
- pandas
- matplotlib
- seaborn

## Installing PyCharm Professional

Follow my tutorial video to do the following:

- Get a student license from JetBrains that will allow you to use JetBrains products for free during our course.
- Set up a JetBrains account.
- Install JetBrains Toolbox.
- Install PyCharm Professional.
- Create and configure your first Python project using PyCharm.

Please make sure that you follow the directions in the tutorial video. These include using the JetBrains Toolbox and installing PyCharm Professional. Students in prior semesters have decided that they could skip steps or take alternative approaches. This has led to problems for them that only become apparent later in the semester.

If there is any reason in the current semester why you should not install the latest available version, I will provide a warning and instructions on finding the correct version here:

- No problems expected. Install the latest available version.

Last Revised

2025-11-16