## Troubleshooting rJava Errors - A Guide

Spatial Data Analysis in R - James Tsalah

**The Problem**: rJava notoriously gets confused by multiple factors regarding the interface between R & Java, so you are almost guaranteed to get some troubling errors at first run.

There are three main issues you can run in to:

- 1. You don't have Java installed on your computer. Download the 64 bit version!
  - Do not just go to <a href="https://www.java.com/en/download/">https://www.java.com/en/download/</a> this just downloads the 32 bit version of java we do not want.
  - Instead go to the manual downloads page @ <a href="https://www.java.com/en/download/manual.jsp">https://www.java.com/en/download/manual.jsp</a>

Download Windows Offline (64 bit), as the other two versions are 32 bit.

<b>#</b>	Windows   Which do	wnload should I cho	ose?	
0	Windows Online filesize: 2.24 MB	Instructions	After installing Java, you may	
0	Windows Offline filesize: 59.46 MB	Instructions	need to restart your browser in order to enable Java in your browser.	
0	Windows Offline (64-bit) filesize: 65.60 MB	Instructions		

If you use 32-bit and 64-bit browsers interchangeably, you will need to install both 32-bit and 64-bit Java in order to have the Java plug-in for both browsers. » FAQ about 64-bit Java for Windows

- If you are on Mac or Linux find the appropriate 64 bit download of Java
- 2. The Java version you downloaded is not the same version as your RStudio architecture (by default 64 bit).
  - RStudio typically downloads an 64 bit application, but Java by default installs as an 32 bit application! You can see where this is going...
  - rJava cannot interface your R session with Java because they have incompatible application architectures by default (64 bit vs 32 bit).
  - Refer to the installation tips to get the 64 bit version of Java above.

- 3. You have the correct 64 bit Java version installed, but rJava still isn't working! This is likely because rJava is quite bad at finding your Java installation...
  - Navigate to your Program Files folder and locate Java, note that it can be in either your Program Files or Program Files (x86) folder.
    - o C:\Program Files\Java
    - o C:\Program Files (x86)\Java
  - Now find the folder within Java which houses the version of Java you have
    - $\circ$  Note: jre-1.8 is the current version of Java as of 5/3/24
    - C:\Program Files\Java\jre-1.8
    - o C:\Program Files (x86)\Java\jre-1.8
  - You can now specify this location to rJava with this line of code! Replace the Java installation path with what is correct for your machine.
    - Sys.setenv(JAVA\_HOME='C:/Program Files/Java/jre-1.8')
  - Finally we can load in rJava successfully!
    - o require(rJava)