



# QUICK START GUIDE

DOWNLOAD AND INSTALL SAGE3 FROM  
[SAGE3.SAGECOMMONS.ORG](https://sage3.sagecommons.org)

THIS GUIDE IS FOR BETA VERSION *1.0.0-BETA.12* (2023)

AFTER INSTALLING SAGE3, LAUNCH IT, AND  
SELECT A SERVER FROM THE BOOKMARKS.

NEW

# SAGE3

## Collaborate Smarter

Bookmarks
Chicago
Hawaii
Development
Hawaii Dev

Enter

CHOOSE ONE  
CLOSEST TO YOU  
OR CHOOSE ONE  
YOUR COLLEAGUES  
MAY ALREADY BE  
USING

## LOGIN TO SAGE3.

# SAGE3

Collaborate Smarter

Host: EVL (Chicago)

Select a server



Login with Google



Login with CILogon



Login as Guest

LOGIN WITH YOUR  
INSTITUTIONAL  
GOOGLE ID.  
IF IT DOES NOT  
WORK USE YOUR  
PERSONAL  
GOOGLE ID

ALTERNATIVELY IF  
YOU ARE A  
RESEARCH  
INSTITUTE, TRY CI  
LOGON

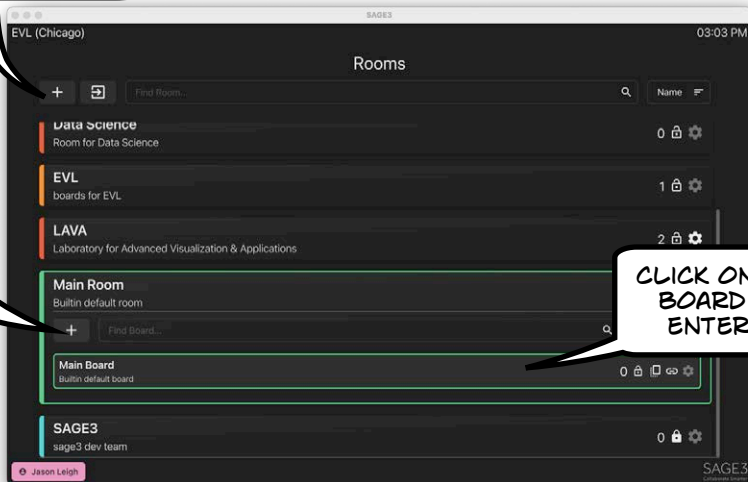
GUESTS CANNOT  
CREATE ROOMS OR  
BOARDS BUT CAN  
EDIT CONTENT

AFTER YOU LOGIN, ENTER A ROOM AND A BOARD.

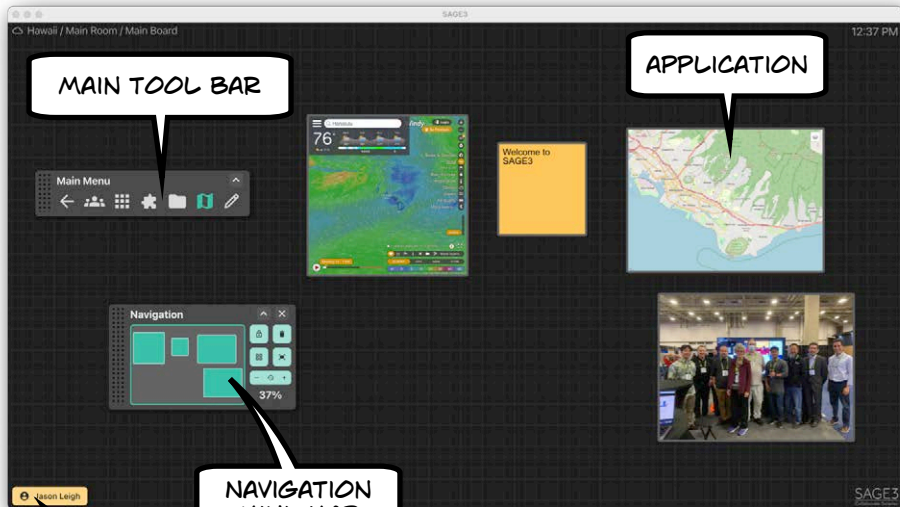
IF YOU LOGGED IN WITH  
AN ID, YOU CAN MAKE  
YOUR OWN ROOM

CLICK "+"  
TO MAKE  
YOUR OWN  
BOARD  
WITHIN THE  
ROOM

CLICK ON ANY  
BOARD TO  
ENTER IT



## INSIDE A BOARD...



ACCESS  
ACCOUNT  
INFO

NAVIGATION  
MINI-MAP

APPLICATION

MAIN TOOL BAR

## NAVIGATING THE BOARD...

CLICK ON  
BOXES TO  
JUMP & ZOOM  
DIRECTLY TO  
INDIVIDUAL  
APPLICATIONS



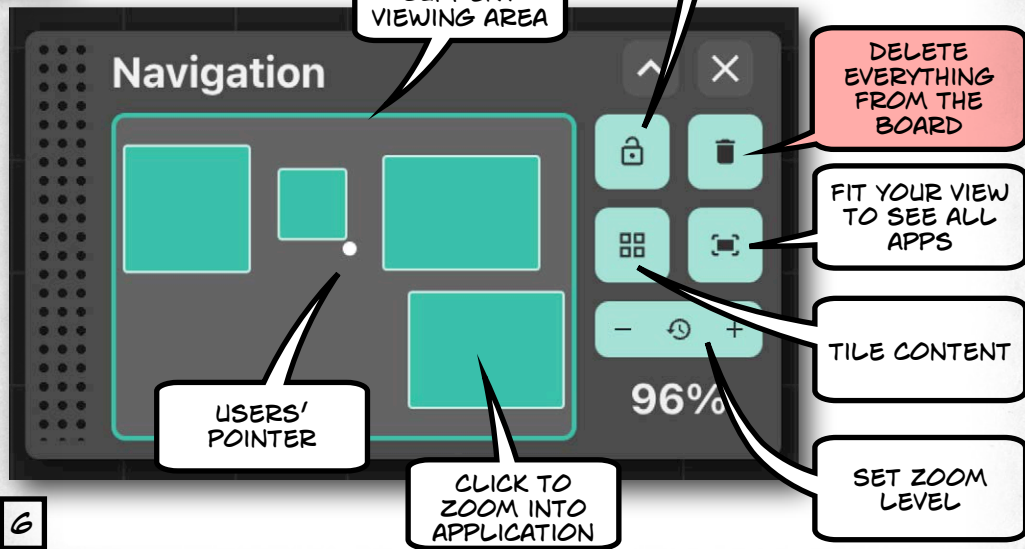
NEW

YOU CAN ALSO CLICK ON A WINDOW YOU WANT TO  
ZOOM INTO, AND PRESS THE "Z" KEY.

5

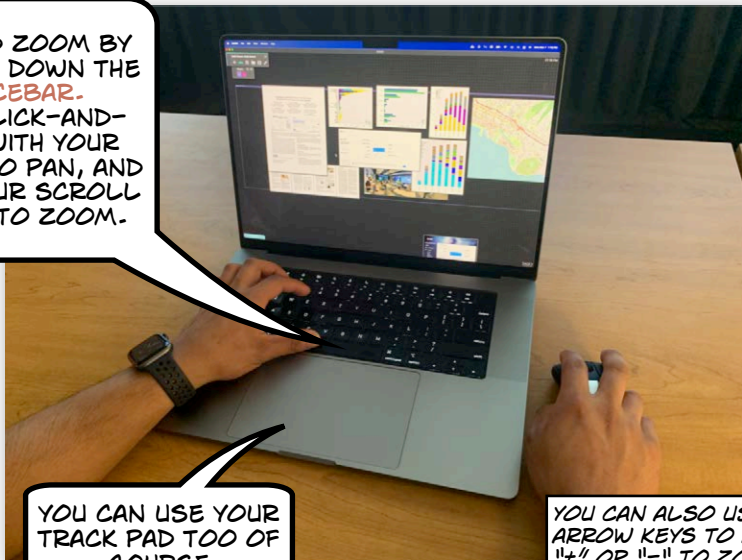
MORE ON THE MINI-MAP...

NEW



## FINE TUNE YOUR NAVIGATION...

PAN AND ZOOM BY  
HOLDING DOWN THE  
**SPACEBAR**.  
THEN CLICK-AND-  
DRAG WITH YOUR  
MOUSE TO PAN, AND  
TURN YOUR SCROLL  
WHEEL TO ZOOM.

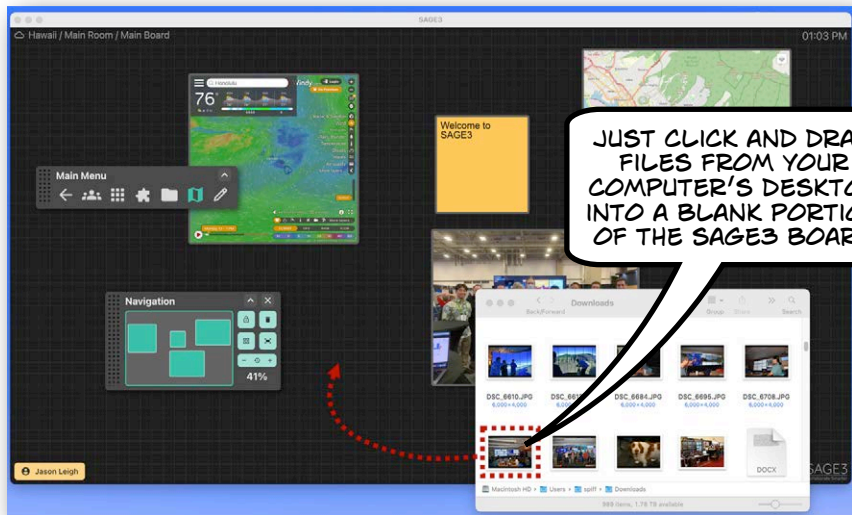


YOU CAN USE YOUR  
TRACK PAD TOO OF  
COURSE

YOU CAN ALSO USE THE  
ARROW KEYS TO PAN AND  
"+" OR "-" TO ZOOM



YOU CAN UPLOAD PDF, JPG, JPEG, PNG, SVG, WEBP, TXT, MD, MARKDOWN, MP4, M4V, PY, GEOJSON FILES & URLS INTO SAGE3...



# CONTROLLING YOUR APPLICATIONS...

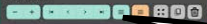
Main Menu



EACH APPLICATION HAS A TOOLBAR WITH ADDITIONAL OPTIONS YOU CAN ACCESS

FOR EXAMPLE, FOR THIS PDF VIEWER, CLICK ON "+" TO SHOW MORE PAGES

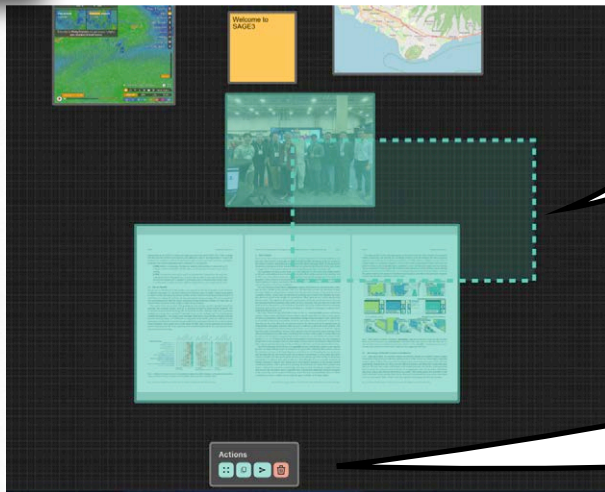
PDFViewer



EVEN MORE OPTIONS HERE, LIKE DOWNLOAD A COPY OF THE CONTENT

## GROUP SELECT ITEMS...

NEW



HOLD DOWN  
SHIFT KEY AND  
DRAG OUT A  
BOUNDING BOX

SELECTED  
ITEMS CAN BE  
DUPLICATED  
OR COPIED TO  
ANOTHER  
BOARD

# ALL THE TOOLS...

NEW

FIND OTHER USERS IN THE BOARD.  
CLICK ON THEM TO JUMP TO THEIR VIEWPOINT.



SCRIBBLE ON THE BOARD.



LAUNCH APPLICATIONS



LAUNCH PLUGINS (MINI-APPS)



NAVIGATE THE BOARD



QUICK ACCESS MENU (PRESS RIGHT MOUSE BUTTON)



## Assets available in Room "Main Room"

Filename	Owner	Type	Modified	Added	Size
2021-2021_SAGE_Final.pdf	Jason Leigh	pdf	09/28/2021	13 minutes	8.3 MB
2023-02-08-08-21-08.m4	Kevin Huhno	mp4	02/09/2023	1 month	4.5 MB
313487988-68950550933117_16567L...	Jason Leigh	jpg	12/11/2021	3 months	43.9 KB
3D Printing Changes the Game in ...	Ryan Theriot	mp4	02/25/2021	1 month	21.3 MB
all_month_genjson	Jason Leigh	genjson	01/05/2023	2 months	6.6 MB
Big_Buy_Logs_Revised_2014.svg.png	Ryan Theriot	png	11/09/2022	2 months	24.7 KB
Demo for the Brain Parcellation ...	Ryan Theriot	mp4	07/02/2021	1 month	5.3 MB

ACCESS ASSETS

12

GIVE THESE APPLICATIONS A TRY...

NEW

VIEW GEOJSON  
FILES

SHARE YOUR  
SCREEN

MAKE A STICKY  
NOTE

OPEN AN  
INTERACTIVE  
WEB BROWSER

## Applications ^ X

ChartMaker

KernelDashboard

LeafLet

Notepad

SageCell

Screenshare

Stickie

Webview

LAUNCH PYTHON  
KERNELS

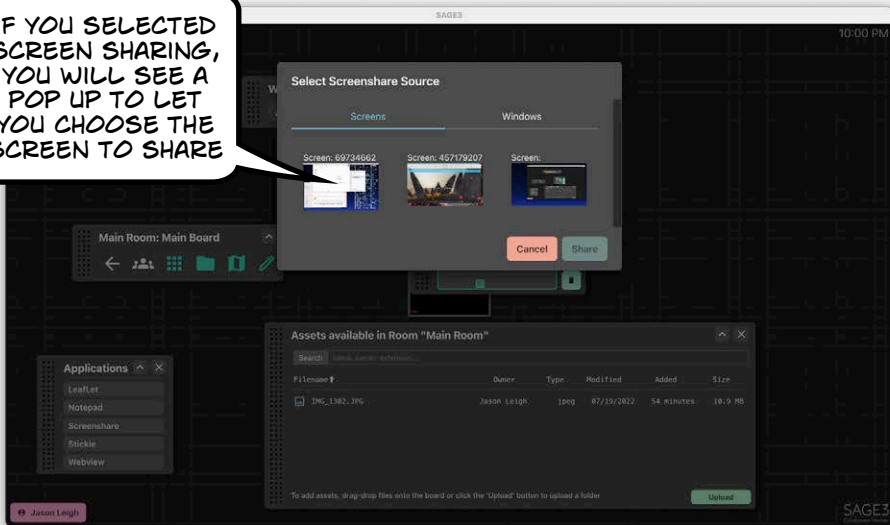
LAUNCH PYTHON  
CODE CELLS

FOR STICKIE NOTES YOU CAN  
ALSO POINT AT A BLANK AREA  
OF A BOARD AND PRESS  
**SHIFT-S**

13

## SCREEN SHARING...

IF YOU SELECTED  
SCREEN SHARING,  
YOU WILL SEE A  
POP UP TO LET  
YOU CHOOSE THE  
SCREEN TO SHARE



SAGE3 CAN SHARE MULTIPLE SCREENS FROM MULTIPLE LAPTOPS AT THE SAME TIME ACROSS THE BOARD!

SHARED SCREEN

SECOND SHARED SCREEN

THERE IS NO LIMIT ON THE NUMBER OF USERS WHO CAN SHARE THEIR SCREEN AT THE SAME TIME



YOU CAN RUN SAGE3 ON A  
LARGE DISPLAY WALL TOO...





JUST INSTALL THE SAGE3 CLIENT APPLICATION ON THE COMPUTER DRIVING THE WALL, AND LAUNCH IT.



STRETCH THE SAGE3 WINDOW TO FILL THE WALL. YOU MAY ALSO CONSIDER USING ULTRAMON TO HELP MAXIMIZE YOUR DISPLAY.  
([WWW-REALTIMESOFT.COM/ULTRAMON](http://WWW-REALTIMESOFT.COM/ULTRAMON))

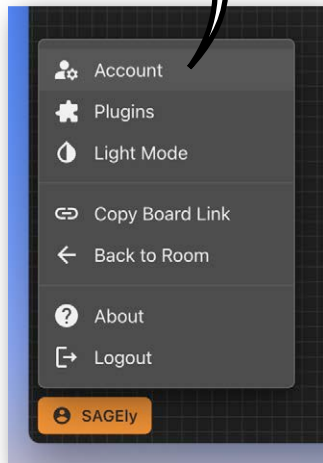
## CONTROL SAGE3 ON YOUR WALL...



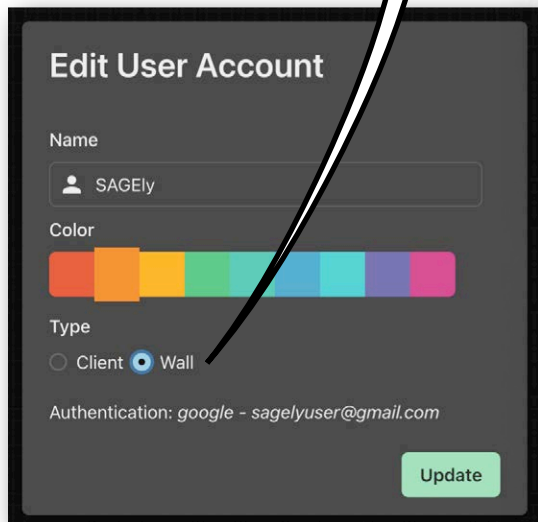
YOU CAN USE YOUR  
COMPUTER'S REGULAR MOUSE,  
A GYROMOUSE, OR THE REMOTE  
MOUSE APP  
([WWW.REMOTEMOUSE-NET](http://WWW.REMOTEMOUSE-NET))

## DESIGNATING THE CLIENT AS A "WALL"...

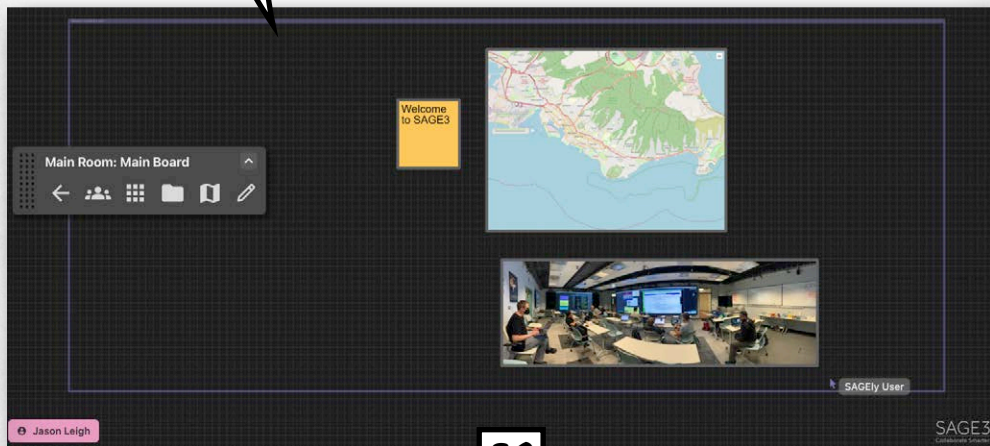
SELECT ACCOUNT



SELECT WALL



A BORDER WILL  
APPEAR TO OTHER  
USERS SO THEY  
CAN SEE THE  
VISIBLE AREA OF  
THE WALL.



# WORKING WITH SAGE'S VERSION OF COMPUTATIONAL NOTEBOOKS...

The screenshot shows the SAGE Kernel Dashboard interface. On the left is a 'Main Menu' with icons for navigation and a list of 'Applications' including ChartMaker, KernelDashboard, Leaflet, Notepad, SageCell, Screenshot, Stickie, and Webview. The 'KernelDashboard' application is highlighted, showing a table of active kernels. Below the table is a 'KernelDashboard' section with a 'Create New Kernel' button. On the right, two SAGE cells are shown. The top cell contains Python code for data analysis and visualization, and the bottom cell contains a scatter plot visualization.

Private	Alias	Kernel ID	Type	Actions
<input checked="" type="checkbox"/>	Python	9f8d831..	Python	
<input checked="" type="checkbox"/>	Jason	22c9d81..	Python	

**KernelDashboard**  
Create New Kernel

**1** Open Kernel Dashboard  
**2** Create a New Kernel  
**3** Create SAGE Cells  
**4** Enter code into SAGE Cells  
**5** Run code in cells

```
1 import matplotlib.pyplot as plt
2 import pandas as pd
3
4 url = "https://raw.githubusercontent.com/jasour/iris/master/iris.csv"
5
6 # Load the dataset (conversion to the numpy array)
7 iris_data = pd.read_csv(url, header=0, delimiter=',', dtype='float64', na_values=0)
8
9 # Split the dataset into features and target variable
10 x = iris_data[['sepal_length', 'sepal_width', 'petal_length', 'petal_width']]
11 y = iris_data['species']
12
13 fig = plt.scatter_matrix(x, dimensions=[0, 1, 2, 3], labels=[0, 1, 2, 3], c=y, s=100)
14 plt.show()
```

UN 10, CPU 100

**NEW**

1. Open Kernel Dashboard  
2. Create a New Kernel  
3. Create SAGE Cells  
4. Enter code into SAGE Cells  
5. Run code in cells

```
1 fig = plt.scatter_matrix(x, dimensions=[0, 1, 2, 3], labels=[0, 1, 2, 3], c=y, s=100)
2 plt.show()
```

UN 3, CPU 0

FOR MORE HELP VISIT...

**TINYURL.COM/SAGECOMMUNITY**

SAGE3 IS MADE POSSIBLE BY THE FOLLOWING  
NATIONAL SCIENCE FOUNDATION AWARDS:

2004014 (UNIVERSITY OF HAWAII AT MANOA),  
2003800 (UNIVERSITY OF ILLINOIS AT CHICAGO),  
2003387 (VIRGINIA TECH)

