

# IOWA BRAINHACK 2021

June and July of 2021

## Instructors

Trevor Cline  
Gail Harmata  
Marco Pipoly

Jax Skye  
Kerry Tarrant

## Time

Fridays 3 - 5 PM

## Location (Virtual)

Zoom ID: 994 7478 7236

## Expectations and goals (no prior coding experience needed)

June - MATLAB fundamentals

July - Event Related Potential (ERP) analyses using eeglab

## Please download MATLAB or Citrix Workspace prior to the first workshop!

Reference the next page for detailed instructions. Reach out to any instructor for assistance accessing a computer or downloading the necessary programs.

## Workshop Schedule

Date	Topic
June 4 <sup>th</sup>	Intro to the MATLAB GUI and Navigation, Syntax, Variables, Data Types
June 11 <sup>th</sup>	Vectors, Matrices, Operators, Arrays, Colon Notation
June 18 <sup>th</sup>	Decisions, Loops, Functions, Intro to Plotting
June 25 <sup>th</sup>	Catch-Up and Troubleshooting
July 2 <sup>nd</sup>	Electrophysiology Theory, Data Preprocessing, Artifact Identification
July 9 <sup>th</sup>	Independent Component Analysis, Intro to ERPs
July 16 <sup>th</sup>	ERP Code Continued, Basic Statistics, Plotting
July 23 <sup>rd</sup>	Catch-Up and Troubleshooting
July 30 <sup>th</sup>	Spectral Power Analysis Presentation - Vick Muller-Ewald, PhD.

~~ Please visit us at (<https://brainhack-uiowa.github.io/uibrainhack2021/>) or contact one of our instructors for more information ~~

## Statement on Disability Accommodations

Individuals with disabilities are encouraged to attend all University of Iowa-sponsored events. If you are a person with a disability who requires a reasonable accommodation in order to participate in this program, please contact Jax Skye ([jax-skye@uiowa.edu](mailto:jax-skye@uiowa.edu)) or Marco Pipoly ([marco-pipoly@uiowa.edu](mailto:marco-pipoly@uiowa.edu)).

## Downloading MATLAB to a personal computer

Go to (<https://its.uiowa.edu/support/article/108841>) to download the MATLAB software which is freely available for students, faculty, and staff at the University of Iowa.

“For devices NOT managed by University IT professionals” > “download MATLAB on the MathWorks site” > Follow on screen instructions

OR

## Accessing MATLAB through the Virtual Desktop (Citrix Workspace)

To access the Virtual Desktop off-campus, you must download the VPN client Cisco AnyConnect at (<https://its.uiowa.edu/support/article/1876>) which is freely available for students, faculty, and staff at the University of Iowa. To install the necessary VPN on your personal computer, follow the instructions for installing on a personal Windows or Macintosh computer.

Next, you need to configure the VPN. The directions to do this are under “How to configure and log into the Cisco AnyConnect client” tab using the same link used to download the software before.

Finally, download the Citrix Workspace app (<https://its.uiowa.edu/support/article/102183>). Click the “How Do I Install the Citrix Workspace App on Windows or macOS?” tab and follow the instructions under the tab.

When you log in to Citrix Workspace, make sure you are connected to the Cisco VPN first.