Big Data and the Smallest People: Leveraging Informatics and Machine Learning to Improve Your Clinical and Research Practice

Workshop at the 2023 Pediatric Academic Societies Annual Meeting

PLEASE READ AND COMPLETE BEFORE APRIL 28

Please bring a fully charged laptop computer with all the workshop materials downloaded in advance.

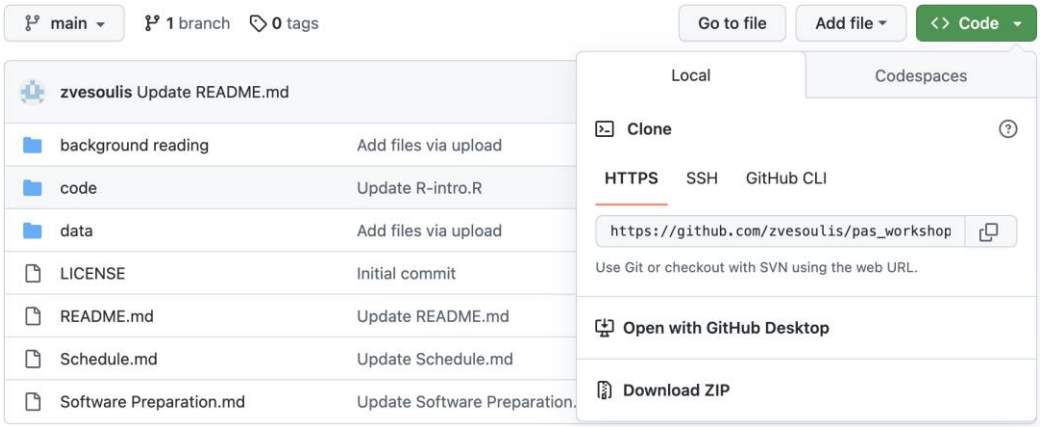
This workshop includes interactive demonstrations using real code and sample data. Please install the needed software and download the materials BEFORE attending the workshop. Given the time constraints, we will be unable to delay the workshop to allow downloads and installation. Links to the materials and software are found below.

Intended audience

This workshop is designed primarily for Neonatologists who are interested in clinical and research applications of Big Data and data analytics who are interested in learning more about handling data and getting an introduction to some analytic techniques using common EMR software and free open-source software tools. Prior programming or analytic experience is not required but participants should be comfortable with moderate to advanced computer skills.

Materials

The latest version of the materials (including slides, sample data, sample code, and documentation) can always be found at our GitHub site: https://github.com/zvesoulis/pas_workshop2023. All materials can be downloaded in a single bundle by clicking the green button marked "< > Code" and selecting "Download ZIP" from the dropdown. This will download a file called "pas_workshop2023-main.zip". The live demonstrations will be conducted under the assumption that this file has been saved to a standard "Downloads" folder and has been extracted.



Software installation
The live demonstrations will utilize two free open-source software packages: Octave and R Studio. Octave can be downloaded from: https://octave.org/download and R Studio can be downloaded from: https://posit.co/download/rstudio-desktop/. Detailed instructions for installing and configuring the software can be found on our GitHub page.

Important Links
GitHub repository for the workshop (https://github.com/zvesoulis/pas_workshop2023)
Epic Training (https://training.epic.com)

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