C84NIM - Assessment (2018)

The assessment for this module is an individual programming project.

The deadline for submission is on the moodle posted on the moodle page, but you can submit your work earlier as well (e.g. if you have travel planned close to the break).

The source code of the completed project and supporting documents must turned into a ZIP archive and uploaded on the moodle page for the module. (See the following page for help on how you can easily do this on the Mac: http://osxdaily.com/2012/01/10/how-to-zip-files-in-mac-os-x/)

- As this is an individual project you **cannot** discuss or receive help with the actual *code* and documentation you write from anyone else. I, your colleagues, and the TA in the class can of course provide help by explaining the concepts you need to solve particular problems.
- You **are allowed** to reuse and modify code from class that was either written by you or by others for the class projects that we have been working on `sliceview()`, `returnSlice()`, `returnTimecourse()`, etc.
- If you find solutions to particular small problems in your program from **online resources** and **Matlab documentation**, **you may use the logic of those solutions**, but you need to demonstrate (with your own comments) that you understand what that code does.
- You **are not allowed** to reuse comments and documentation written by others; these need to be written by you.

Criteria

You will be assessed on 3 aspects of the project.

1. The first is how well your program meets the objectives stated in the project description. Pass level work requires the resulting program to achieve most of the stated objectives while distinction level work will go beyond the stated objectives.

2. The second assessed component is the documentation of the code. Pass level work will allow someone with limited knowledge of the project to run the source code while distinction level work will provide naive individuals insight into not only into how to use the program, but also how it is structured and works such that the code could be modified to accomplish related tasks.
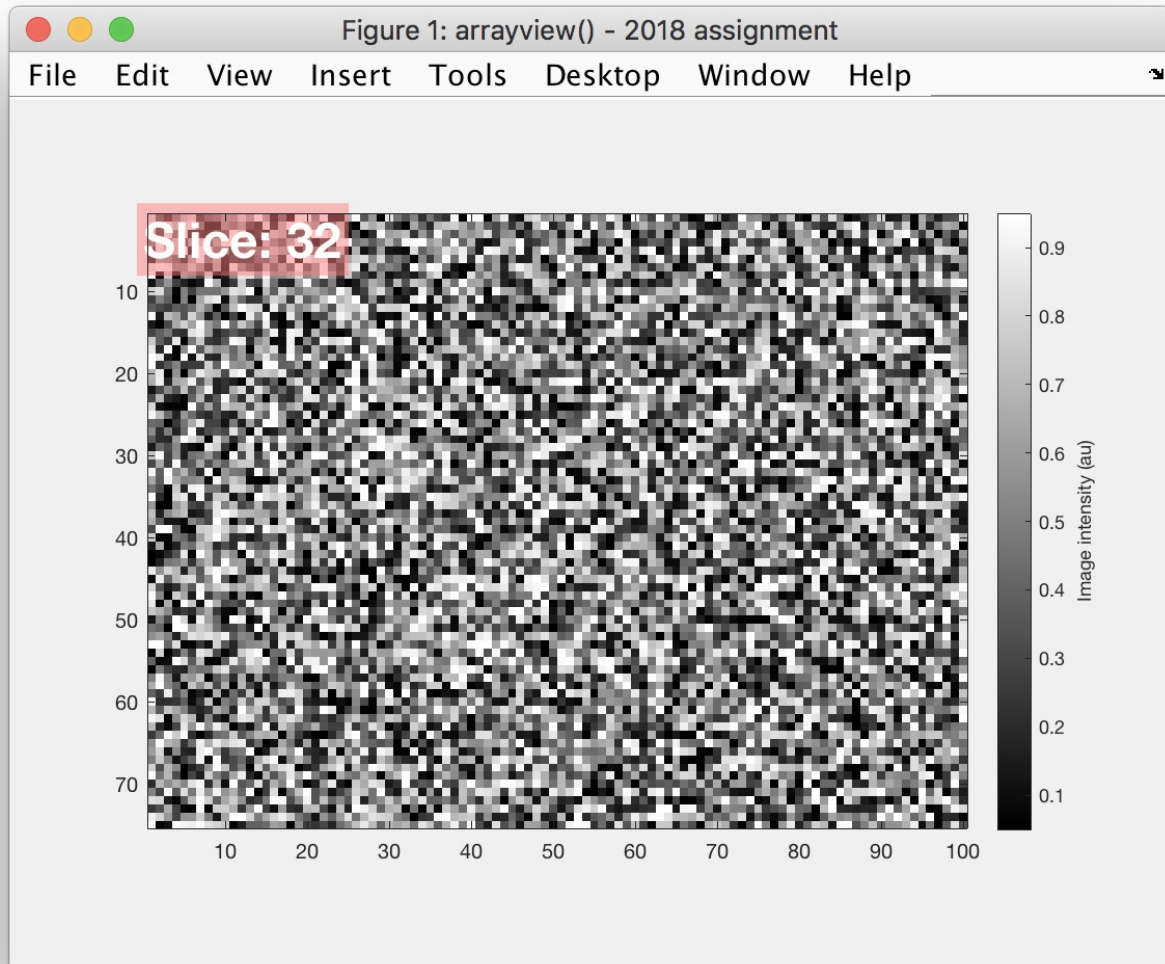
   Part of the 2018 assignment is to produce a script that runs through a particular set of analysis steps and displays the results. In addition to the M-files (code), you should also submit a PDF file that displays the code, plots of intermediate results / images (as appropriate). You should use the `publish()` command you learnt about in class to write this.
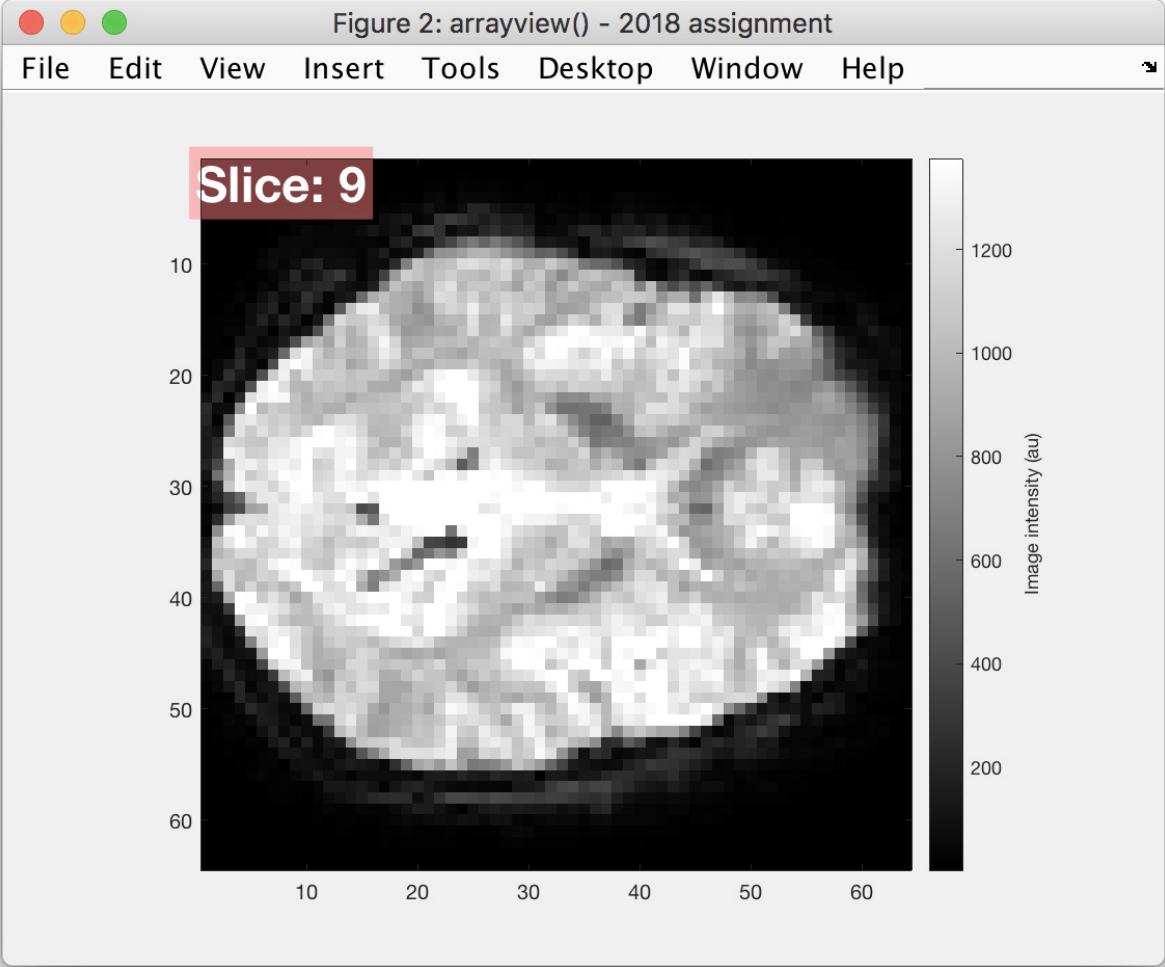
3. The final assessed component is the quality of the code. Pass level work requires functional code that has a logical structure and no obvious inefficiencies while distinction level work would consist of modularized code that cleanly handles errors and can be reused and extended.
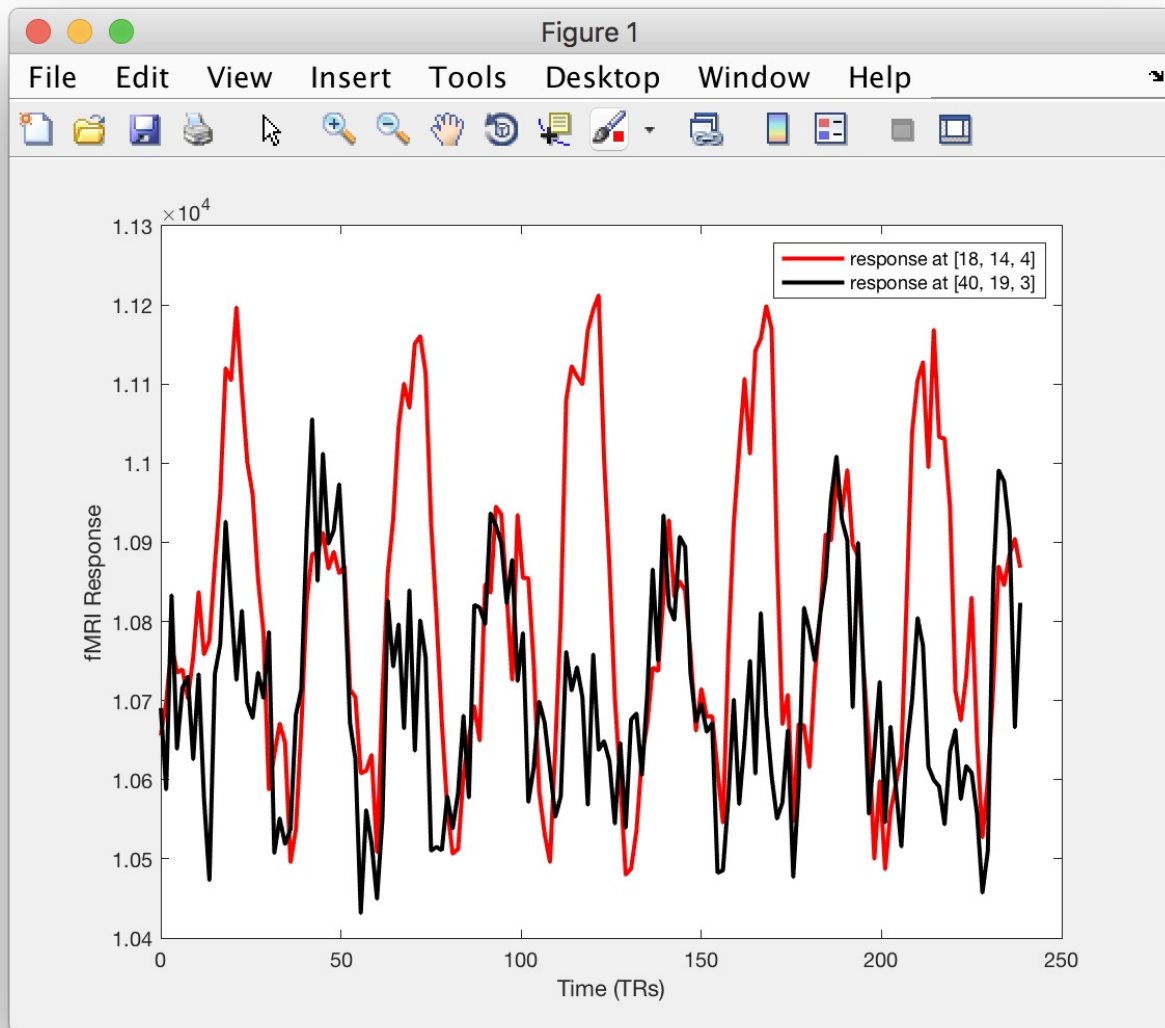
Imaging analysis project

Implement an analysis script, helper functions, and PDF documentation as outlined in `assignment.m`

Example screen grabs of Figure windows

Figure 2: arrayview() – 2018 assignment

Wednesday, Nov 14, 2018, 12:27 PM

... and put it all together in this shape:

2018 - Introduction to Matlab Programming

Table of Contents

Assignment

2018-11, set by Denis Schluppeck

YOURDATE, completed by YOURNAME

Summary

Provide a short abstract (<250w) of

Load fMRI data

--- INSPECT the code for arrayview() --- %

There is a code section starting ~line 35 that requires some lines of code to fix the functionality of the program.

Display fMRI data

Using the fixed version of arrayview(), display the 4d (turned 3d) data NOTE - if you have problems turning 4d into 3d data, a fallback options is to only display the first timeframe of the 4d data.

Write some helper functions: