It is strongly recommended that you install the required software before the day of the workshop.

1) Install Stan and Matlabstan
If you have a windows or a linux computer, look at the files for how to install Stan on those platforms. If you have a mac, go to: https://github.com/brian-lau/MatlabStan/wiki and follow the instructions under 'getting started'. This will lead you to download: CmdStan, MatlabProcessManager and MatlabStan. For MatlabStan, don't clone the repo, but follow the link 'get a copy here' (https://github.com/brian-lau/MatlabStan/releases/tag/v2.15.1.0) and download the .zip file. This is because there are some code changes in the github repository.

2) Setting up Stan
In the MatlabStan folder, inside +mstan, open stan_home.m Change the path to your installation of cmdstan. Add MatlabStan to your homepath.

3) Testing your Stan setup
Open Matlab. In Matlab, set the current folder to the folder with the Matlab course files (e.g. 'CourseMatlab_ParticipantVersion' unless you have renamed it). Open and run the Matlab script 'StanTest.m'. If your Stan is set up correctly, you should see an output like this:

```
Inference for Stan model: StanTest_model
4 chains: each with iter=(500,500,500,500); warmup=(0,0,0,0); thin=(1,1,1,1); 2000
Warmup took (0.0076, 0.0047, 0.0050, 0.0053) seconds, 0.023 seconds total
Sampling took (0.013, 0.0083, 0.0081, 0.0083) seconds, 0.038 seconds total

                Mean     MCSE  StdDev     5%    50%   95%  N_Eff  N_Eff/s     R_hat
lp__             -69  3.6e-02     1.1    -71    -69   -68    853    22414   1.0e+00
accept_stat__   0.84  6.1e-03    0.19   0.40   0.91   1.0    989    25986   1.0e+00
stepsize__       1.2  5.9e-02   0.083    1.1    1.2   1.3    2.0       53   9.5e+13
treedepth__      1.1  9.1e-03    0.35    1.0    1.0   2.0   1492    39214   1.0e+00
n_leapfrog__     2.6  1.7e-02    0.78    1.0    3.0   3.0   2000    52564   1.0e+00
divergent__     0.00  0.0e+00    0.00   0.00   0.00  0.00   2000    52564       nan
energy__          70  5.0e-02     1.5     68     70    73    866    22760   1.0e+00
y_mu             9.8  1.5e-02    0.55    8.9    9.8    11   1303    34234   1.0e+00
y_sd             3.5  1.2e-02    0.41    2.9    3.4   4.2   1110    29162   1.0e+00
Samples were drawn using hmc with nuts.
For each parameter, N_Eff is a crude measure of effective sample size,
and R_hat is the potential scale reduction factor on split chains (at
convergence, R_hat=1).
>>
```

4) Text editors for Stan files
.stan files can be opened with any text editor. But, it will make coding much easier if you choose one that has code highlighting for Stan. Recommendation: Atom and the Stan plugin (https://atom.io/packages/language-stan). This can easily be installed, as described in the link from the Packages tab in Atom. (Emacs also has a Stan plugin, but this may be tedious to install unless you're very familiar with emacs)
Here are screenshot for how to get the stan plugin for atom:
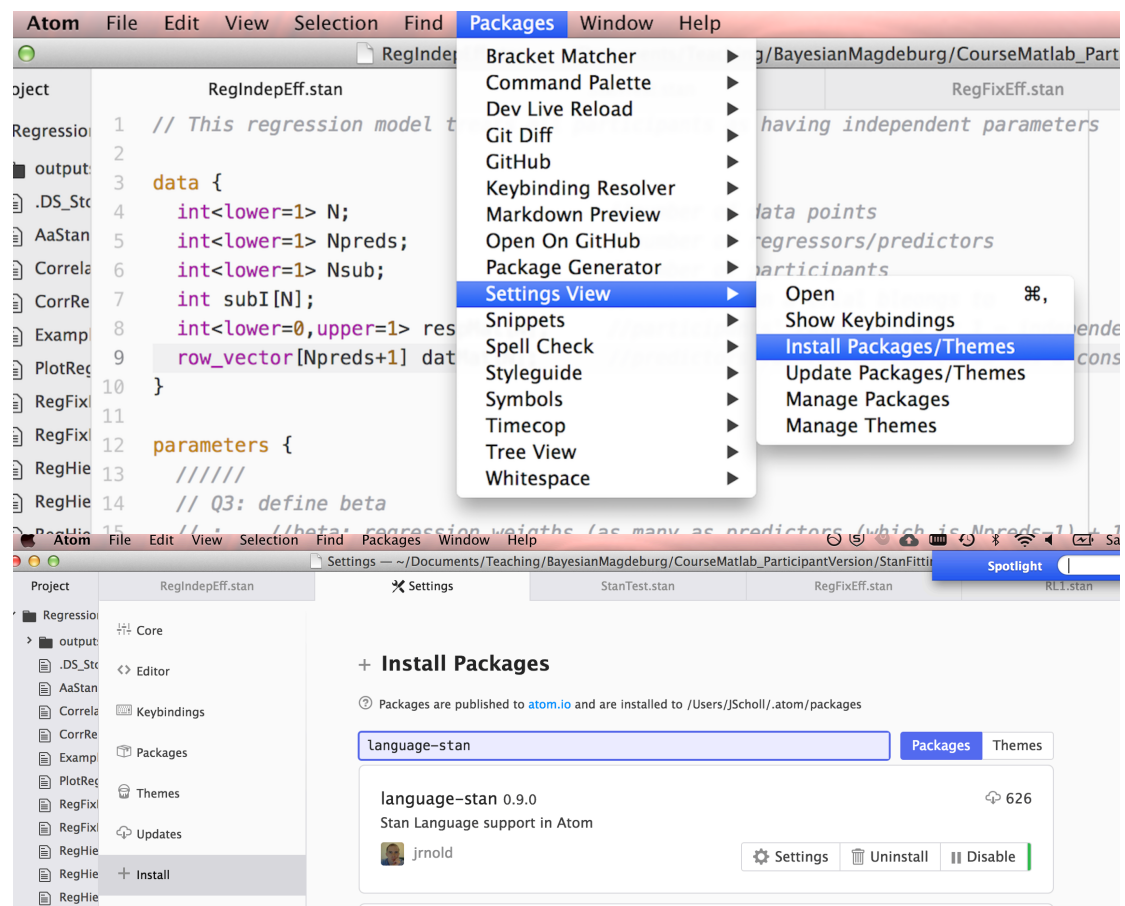
5) Matlab toolboxes
You will need: Statistics and Machine Learning Toolbox