## Notes on Numerical Solutions for Optimal Stopping Problems

## September 8, 2017

These notes expand on Ben Moll's superb notes in http://www.princeton.edu/~moll/HACTproject/and in particular http://www.princeton.edu/~moll/HACTproject/option\_simple.pdf solving option value problems as HJB Variational Inequalities.

## TODO:

- We probably want to put most of the http://www.princeton.edu/~moll/HACTproject/option\_simple.pdf notes in there, but adding in the details on the discretization, boundary values, upwind finite differences, etc. that come from http://www.princeton.edu/~moll/HACTproject/HACT\_Numerical\_Appendix.pdf and http://www.princeton.edu/~moll/HACTproject/HACT\_Additional\_Codes.pdf as required.
- Want to have every formula used in the matlab code explictly listed, with special care on the boundary values/etc.