# Paper Revision Summary

## Jacob Jones, ECE551

* *From Updated Proposal feedback:*
  + Moved CNN into Method section
  + Enlarged project flowchart
  + Included discussion on MFCC calculations, including code excerpt
  + Removed mentions of natural language processing – this is speech detection!
* *From Midterm Presentation feedback:*
  + Greatly enlarged the size of the dataset – this seemed to do the trick!
  + Specified the sizes of the training, validation, and testing subsets.
* *From Final Presentation feedback:*
  + Included better discussion about the noise
  + Discussed reason for one-second audio clip – convenience! :)
  + Discussed validation and testing
  + Discussed differences in existing methods
  + Discussed what didn’t work and how I got around it
* Reorganized paper into a more logical structure. Headings don’t match what was in the proposal, but I feel the paper flows better now. New structure is as follows:
  + Background
    - Motivation
    - Expected Contribution
    - Competing Methods
    - Comparisons with Competing Methods
  + Method
    - Wake Word Selection
    - Code
    - Dataset
    - MFCCs
    - CNN
    - Model training, validation, and testing
    - Model deployment
  + Discussion of Results
  + Conclusions
  + Appendix
    - Data synthesis routine
    - MFCC routine
    - Keras model building routine
    - Real time prediction routine
* Misc. changes
  + Updated wake word after reading paper on 3-syllable wake words
  + Updated MFCC images after code changes
  + Updated loss and accuracy plots after code changes
  + Changed title – focus now is on model *for* hardware, not model *on* hardware
  + Included references to helpful code found online
  + Removed image of Smithers cartoon