# Week 9 - HMI Research Group

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Long Phi Nguyen (뉀피롱), 한국전자통신연구원

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## Summary

Speech module is almost at its final stages. Integration with gesture generation remains.

## Points

- Using `spaCy`, wrote `language_processing.py`, which is part of the entire workflow (composed of `language_processing.py`, `gesture_suite.py`, and the `pickles` folder, where all file data is stored).
- Defined a preliminary corpus with roughly 10 entries defined for `yes` and `no`.
- Trained an online model, `SGDClassifier` from `sklearn`, to classify new inputs and learn on the fly and adjust itself. Test results are good so far.

## Plans

- Feature more classes in the classification problem. Ideas in mind include `you`, `this`, and more.
- Consult an online word/sentence bank or something similar to train the machine learning model with much more than just 10 examples.
- Completely integrate the speech and gesture modules together to get the final product.
- Transfer experiments over to the real NAO robot.

## Addendum

The repository can be found `here`. The new file, `language_processing.py` is included. Another new file, `corpus_script.py`, was used to construct the corpus and dump it to disk for the speech module to read.