Week 2 - HMI Research Group

8 Jun 2017 - 16 Jun 2017

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June 16, 2017

Summary

This week consisted of primarily getting used to applied learning machine methods and possible libraries to explore in preparation for doing work with the NAO robot. The NAOqi API was studied, given online documentation from Aldebaran.

Points

- Learned how to use the `scikit-learn` Python library for machine learning.
- Read up on various parts of machine learning—neural networks, classification, regression.
- Studied Aldebaran documentation regarding the creation of new NAO modules in Python.
- Worked with the `spaCy` Python NLP library to better understand how words are parsed and processed syntactically.

Plans

- Feed inputs to NAO and have it learn what gestures it should perform based on processing of the given input.
- Compare models and determine which works best in learning and NLP.
- Work further with `spaCy` and better understand how language works computationally.
- Get more familiar with `scitkit-learn` and understand reinforcement learning.

Miscellaneous

Mini-projects worked on to apply methods learned can be found at `github.com/longnguyen1997`. Projects are titled `food_preferences` and `ml_model_comparisons`.