Dissertation Layout

**Abstract**

**Contents**

**Introduction**

* + - MCI
    - Alzheimer’s Disease
    - Fundamentals of MRI (Imaging - ROIs)
    - Fundamentals of genetics (SNPs)
    - Fundamentals of the methods:
      * 1. CCA
        2. KCCA
        3. DCCA
        4. OPNMF
        5. MCA - FAMD
        6. SVM (Classification Algorithms)
    - ADNI Dataset analysis

**Methodology**

* + - Data Pipeline Overview
    - Linear Regression
    - OPNMF
    - DCCA model training:
      * 1. Hyperparameters
        2. Methods & class functions
        3. Parameters
    - Classification
      * 1. SVM kernels
        2. Grid Search & Cross Validation

**Experiments**

* + - DCCA model optimization
    - Classification scores
    - Observations

**Conclusions**

* + - Conclusions about the use of DCCA
    - Conclusions about the results achieved

**Discussion**

**Limitations**

**Acknowledgements**

**Glossary**

**Bibliography**