

Course contents:

The following assignments will be covered:

- A1: "Linear Regression"
- A2: "Logistic Regression"
- A3: "Multi-class Classification and Neural Networks"
- A4: "Neural Network Learning"
- A5: "Regularized Linear Regression and Bias/Variance"
- A6: "Support Vector Machines"
- A7: "K-Means Clustering and PCA"
- A8: "Anomaly Detection and Recommender Systems"

Session 1:

Activity	Time	Remark
Introduction	42m	Self-study
Linear Regression with One Variable	1h10m	Self-study
Linear Algebra Review	1h	Self-study
Linear Regression with Multiple Variables	1h4m	Self-study
Octave/Matlab Tutorial	1h19m	
Work on assignment "Linear Regression"	Rest	

Session 2:

Activity	Time
Presentation of solution to assignment A1	20m
Logistic Regression	1h11m
Regularization	39m
Work on assignment A2	Rest

Session 3:

Activity	Time	Remark
Presentation of solution to assignment A2	30m	

Neural Networks: Representation	1h2m	Self-study
Neural Networks: Learning	1h17m	Self-study
Work on assignments A3 and A4	Rest	

Session 4:

Activity	Time	Remark
Presentation of solution to assignment A3 and A4	60m	
Advice for Applying Machine Learning	1h3m	Self-study
Machine Learning System Design	59m	Self-study
Work on assignment A5	Rest	

Session 5:

Activity	Time	Remark
Presentation of solution to assignment A5	30m	
Support Vector Machines	1h37m	Self-study
Unsupervised Learning	39m	Self-study
Dimensionality Reduction	1h7m	Self-study
Work on assignments A6 and A7	Rest	

Session 6:

Activity	Time	Remark
Presentation of solutions to assignments A6 and A7	60m	
Anomaly Detection	1h30m	Self-study
Recommender Systems	58m	Self-study

Work on assignment A8	Rest	
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Session7:

Activity	Time	Remark
Presentation of solution to assignment A8	30m	
Large Scale Machine Learning	1h3m	Self-study
Application Example: Photo OCR	56m	Self-study
Guest lecture TBD	Approx 45m	
Outstanding issues	Rest	