Machine Learning for Big Data and Text Processing: Foundations

Class runs 10:00 am - 4:45pm on Monday and 9:00am - 4:30pm on Tuesday.

Monday

10:00 – 11:00am: Introduction to ML
11:00am – 12:00pm: Formulation of ML problems
12:00-1:00pm: Lunch break
1:00 – 2:00pm: Linear classification/regression
2:00 – 2:15pm: Coffee break
2:15 – 3:45pm: Loss, regularization, gradient algorithms
3:45 – 4:45pm: Tutorial on using ML packages

Tuesday

9:00 – 10:00am: Features, missing data
10:00 – 11:00am non-linear classification
11:00 – 11:15am: Coffee break
11:15am – 12:15pm: Feed-forward neural networks: representation
12:15 – 1:15pm: Lunch break
1:15 – 2:15pm: Neural networks: algorithms
2:15 – 2:30pm: Coffee break
2:30 – 3:30pm: Convolutional networks (images)
3:30 – 4:30pm: Tutorial on using DNN packages