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