

# Outlying and Influential Data - Seminar 4

Dr. Donald Davendra  
MATH 567 - Winter 2016

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## 1 Task

Influences on the regression coefficients combines leverage and discrepancy. Two of the measures are the *Cook's distance* and *leverage* (hat value)

This seminar will require you to do the following:

1. Mathematically describe the *Cook's distance* resampling method.
2. Describe the *hat value* in respect to the following properties (*mathematical description*):
  - (a) average *hat value*,
  - (b) simple regression,
  - (c) multiple regression,

## 2 Submission

Write a one page report on the two measures. Submission is on Tuesday, 1 March during lectures.