STOR 891: SELECTED TOPICS ON NONPARAMETRIC STATISTICS
FALL 2018

Course Information

Lecture: Mon.Wed. 11:15AM - 12:30PM, 107 Hanes Hall
Optional Textbooks: Nonparametrics: Statistical Methods Based on Ranks, by Lehmann.
Introduction to Nonparametric Estimation, by Tsybakov.
All of Nonparametric Statistics, by Wasserman.

Instructor

Instructor: Kai Zhang
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Office Hours: Wed. 2:00PM - 3:00PM; by appointment.

Tentative Topics

• Classical rank-based methods and their efficiency
• CDF estimation and bootstrap inference
• Nonparametric density estimation
• Minimax theory and lower bound techniques
• Measurement and detection of dependence

Paper Reading Project

• Important papers on the covered topics are selected.
• Each student in the class chooses one paper to read.
• Requirements for the project:
  − A written report summarizing the paper.
  − A presentation of the paper to the class.

Grading

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<tr>
<th>Homework</th>
<th>Paper Reading Project</th>
<th>Total</th>
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<tbody>
<tr>
<td>60%</td>
<td>40%</td>
<td>100%</td>
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Notes

The Instructor reserves the right to make any changes he considers academically advisable. It is your responsibility to attend classes and keep track of the proceedings.