Statistics 231 / CS229T: Statistical Learning Theory

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Lecture Notes

All lecture notes

- For Stanford affiliates, all lectures with notes are available in this folder

Overview

- Overview (written)

Concentration and convergence

- Concentration inequalities and tail bounds (written)
- Uniform concentration inequalities, martingales, Rademacher complexity and symmetrization (written)
- VC Dimension (written)
- Metric entropy and chaining (written)
- Fast rates of convergence for learning problems (written)

Convex optimization

- Convex analysis background (written)
- Subgradient methods (written)
- Mirror descent and AdaGrad (written)

Online learning

- Online learning and online convex optimization
- Bandit problems

Kernels

- Basics of Kernels