

## Topic 20: Random Forest

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**Key points:** .

**Disclaimer:** *The note is built on Prof. [Jinchi Lv](#)'s lectures of the course at USC, DSO 607, High-Dimensional Statistics and Big Data Problems.*

## 20.1 Motivation

Denote by  $m(\mathbf{X})$  the measurable nonparametric regression function with  $p$ -dimensional random vector  $\mathbf{X}$  taking values in  $[0, 1]^p$

[Chi et al. \(2022\)](#)

## References

Chien-Ming Chi, Patrick Vossler, Yingying Fan, and Jinchi Lv. Asymptotic properties of high-dimensional random forests. *The Annals of Statistics*, 50(6):3415–3438, 2022.