

STAT 546: Machine Learning in Data Science

Introduction

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<https://teazrq.github.io/stat432/>

August 26, 2025

University of Illinois at Urbana-Champaign

STAT 546: Machine Learning in Data Science

- Course Website
 - <https://teazrq.github.io/stat546/>
- Instructor: Ruqing Zhu, Ph.D <rqzhu@illinois.edu>
- Teaching Assistant: Mehrdad Mohammadi <mehrdad3@illinois.edu>
- Office hour:
 - Ruqing: Mon 2:30 - 3:30 PM, 137 CAB
 - Mehrdad: Wed 7 - 8 PM [Zoom: 88910194092](#), pw: 546
 - Make an appointment by email

- Machine learning in general
- Reinforcement learning, random forests, survival analysis, etc.
- Personalized medicine, decision making, computational challenges ...
- Applications to real world problems: sepsis, infectious diseases, nutrition and food, cancer, genetics ...
- more at sites.google.com/site/teazrq/

- Course Syllabus
 - Topics and objectives
 - Textbook and references
 - Prerequisites and software
 - Homework, mini-projects and grading
- ChatGPT, Copilot and other AI tools

Logistics

- Canvas: discussion, grades
- github.io/stat546/: course material, posting homework
- Gradescope: submit homework

Discussion Board

- [Canvas](#) discussion board as the primary platform for communication
- Each homework has a thread, post your question as a new reply to the main thread
- For [email](#) communications, start with “[Stat 546](#)” in your email title.

Homework

- We will have 6-8 sets of homework (2-3 for each topic)
- Due on Wednesday (11:59PM). See information on course website.
- Some contains a mini-project
- Late submission allowed: up to 4 days, 10% penalty per day
- Submit to gradescope (Entry code: NGZK34)

Homework

- All homework reports should be submitted in PDF format
- All proofs must be in latex form, with clear logic
- All code chunks visible, well structured with necessary comments
- Tables/figures should have clear legend, caption, with text readable
- Key results should be highlighted

GPT and other AI tools

- Use them!
- But be responsible!

Questions?