

Class 15: Future of Machine Learning vs Future of Economists

Lei Ge

Renmin Univ. of China

2025 年 5 月 29 日

① Overview

② Future: Career

1 Overview

2 Future: Career

We learned many things

- Full Python Training, Linear Regression, LASSO, Ridge, Tree model, RF, Xgboost, Ensemble, ANN, Convolutional Neural Network, Transformer
- Cloud Computing, Git, Jupyterlab, conda, python
- huggingface, kaggle, CSMAR, WRDS ...

We learned many things

- The class will come to the end
- But it is the beginning for you to learn new things by yourself

What we learned from this class (重中之重)

- How to burst your young talents out
- How to overcome difficulties and learn new things by yourself
不要害怕
- 独立思考其实并不简单

How Independent Thinking?

- Bottom-line: rely on and believe in **yourself**
- Question: Why not on careers center, parents, teachers ... ?
(from the point view of modeling)

We know your time is precious and limited

- Job search? GRE? Graduate School Application? Internship? Frustrated? Involution? ...
- We pushed you for coding, modeling, presenting ...
- We can not relax the standard for the class. Why?

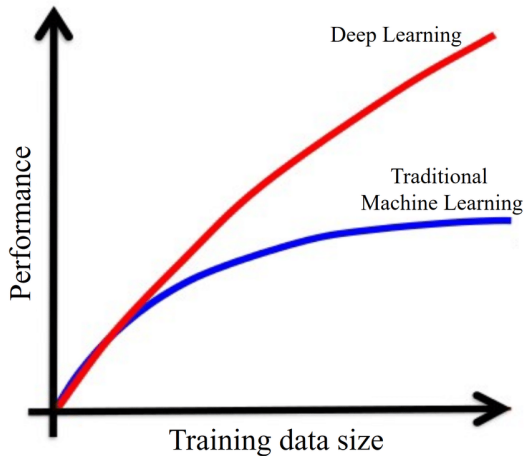
"Do" is important and hard



1 Overview

2 Future: Career

What can we learn from modeling? (figure below)



What can we learn from modeling?

- More data \rightarrow New Information(主动获取信息)
- New algorithm & tech \rightarrow New thing (主动尝试新事物)

Future: New Information (主动获取信息)

- learn the trends from Glassdoor, LinkedIn, CSDN, kaggle, huggingface
- talk talk talk, with your classmates, seniors, alumni and professors
- hard for the first step

Future: New Information (主动获取信息)

- Motto: "The truth shall make you free"
- California Institute of Technology (Leonard and Sheldon work at; 46 Nobel laureates)

Future: try new things (主动尝试新事物)

- New modeling, AI, modernized workflow
- Internship on new things
- Papers and conference (新的领域年轻人更容易出头)

New thing: team up for the top listed papers

- Simple Rule Game: S, A, A-, B, B-
- A- or B(RR) = Top PhDs (around 3k USD monthly salary)
- 1A = Assistant Professor or Quant Researcher **worldwide**
- Target: Journals Ranking in Finance, Economics

worldwide = Hongkong, Beijing, New York, London ...

New thing: team up for the top listed papers

- Can add value to your future industrial works or grad study. Top papers have recognition at every corner of this world (有随时可以提桶跑路的自信)
- Team up with classmates or professors (your talent is at its peak in your life, why not)

植入广告: Our research team (gelei@ruc.edu.cn)

- **Need:** Self-starters and talents together for the top journals
- **Resources:** Professional quant researcher as mentor, abundant computation resource, funds and data for the research
- **Target:** No report writings, No politics, Only papers
- Plz join 人大数量经济 and our team (gelei@ruc.edu.cn)

However, "new" is harder than "old"

- As human, we fear new things
- It is hard to trying new than staying the old way
- Solution: young talents

However, "new" is harder than "old"

- Example: reforms in history, try new 太难了
- Failed talents who refused new things: 刚毅、徐桐、赵舒翘、倭仁
- New thing vs old thing: "Arrival of the Black Ships" around Japan 1852

Future: try new things

- Critical new thinking and independent thinking like a model
- Try everything like the gradient method, keep going on even after setbacks
- 人生如负重远行，要勇于不断尝试，就像是梯度法一样

不负平生所学

各位同学过去十几年勤学苦练的技能得到发挥。比如：英文能力、计量经济学能力、经济学能力、编程能力、更重要的是创造力与智慧。

- ① Math skills
- ② English reading skills
- ③ Economics skills
- ④ Coding skills
- ⑤ Young talents