Machine Learning for Economists

Class 3: Our Weapons: Git, Cloud Computing & Python

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Git

Cloud Computing

Your Final Python Class (Maybe)

Your Final Python Class (Maybe)

Git

Why Git?

- Git is must-learn tools for the modelers in industries
- With Git you cooperate with your teammates easily
- We use Git to 1) share slides, 2) share codes, 3) submit homeworks & quiz 4) cooperate on modeling projects with teammates

Our Git Group

- 1. Github (人大量化) https://github.com/Quant-of-Renmin-University/QuantEcon2025_RUC
- 2. Please add to our Git group, team and repo for the permission (详细请看上一讲)
- 3. Go to our class repo
- 4. Create a personal folder by using submission branch

Cloud Computing

Your Final Python Class (Maybe)

Why Cloud Computing

- Powerful
- Built for AI and Quant Modeling
- Cheaper than traditional computers
- Amazon AWS, Microsoft Azure, Google Colab,

Cloud Computing Not Cheap

- Could computing is not cheap for us as students
- Price charts for Ali Yun (Links)

云服务器ECS规格	CPU内存	公网带宽	系统 盘	优惠价
GPU云服务器gn6v(ec	8核32G(16G显存V100计	1M-200M	40G系	3048.00元/月,2
s.gn6v-c8g1.2xlarge)	算卡)	带宽可选	统盘	7432.00元一年
GPU云服务器gn6i (ecs.	4核15G (NVIDIA 16G显存	1M-200M	40G系	1339.20元/月,1
gn6i-c4g1.xlarge)	T4计算卡)	带宽可选	统盘	2052.80元一年
GPU云服务器vgn6i (ec	4核23G(NVIDIA 支持4GB	1M-200M	40G系	469.46元/月,42
s.vgn6i-m4.xlarge)	和8GB显存T4计算卡)	带宽可选	统盘	25.14元一年

Free Cloud Computing

- Github Codespaces
- Google Colab
- Kaggle
- Limitations: 1) not enough CPU or GPU; 2) Time not enough; 3) Can't access

RUC Cloud Computing (follow me)

- Thanks to Renmin University Cloud for our students
- Renmin Univ. invested great fortune to help you to learn AI & to be the talent of the future
- https://datahub.ruc.edu.cn

Setup RUC cloud computing (Follow Me)

- 1. Go to https://datahub.ruc.edu.cn
- 2. follow me to add the class group
- 3. Use it !!!

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Cloud Computing

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- We will go through QuantEcon Classes (depending our your study progress)
- Please RUN the codes step by step following me on class
- Also you should run them and read section by section at home at least once
- To push your Python learning, we have cold calls on class for the codes we learned

JUST RUN IT!!!

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Cloud Computing

Your Final Python Class (Maybe)

- Your first Al project
- Use the python skills we learn from first 3 classes
- Solve the problems within team, but coding independently

Grad School Application Generator

- The application materials will take us huge time
- Application agencies, they will charge tens of thousands of CNY
- The agencies always make mistakes
- So we use the python and template to generate the Application Letters automatically