Machine Learning
(機器學習)
Course Introduction, 09/09/2013

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Complicated Contents

- from a Taiwanese student taking MIT ML class (translated): *The professor started writing math equations as if he was using some writing accelerator. After class I always felt feeble. The worst part is: I needed to understand the contents as soon as I can. Otherwise I cannot finish the homework and cannot follow up in the next class.*

- NTU ML class: designed to be as good as the best classes in the world

- similar things will happen to you

If you are not willing to be so miserable, ...
Four Reasons for NOT Taking the Course (2/4)

Strict Instructor

• Will you give me a second chance if I copy homework from other people? **NO**.
• Could you let me pass because I will be kicked out by the 1/2 rule? **NO**.
• Will you change my score from F to C? **NO**.
• How many will pass? **Any**, if necessary.

If you do not like a **strict** instructor, ...
Four Reasons for NOT Taking the Course (3/4)

Huge Loads

- from a student taking ML 2010 (posted on BBS):

lxxxxxx9: 作業光一小題就要我們test 100次？(100*10min = 16hr) 唉 反覆檢查許多遍 希望是我的code寫壞了 不然出這作業的人真的很沒良心= =

- our class: **four to six** times harder than a normal one in NTU
- around seven homework sets (and a hard final project)
- homework due within two weeks
- even have homework 0 **NOW**
  - already hard
  - though no need to submit

If you do not want to spend **so much time on homework**, ...
Four Reasons for NOT Taking the Course (4/4)

Experimental

- invited by NTU as one of the **Massive Online Open Courses** to be on NTU-Coursera
  - **slides** teaching (for the first time!)
  - **Mandarin** teaching (for the first time!)
  - new homework setting (tentatively: multiple-choice problems with detailed explanations)
  - experimental “**recorded**” teaching mode
- always **risky** to be in an experimental class
- you can **choose to take the future online course** instead

If you do not want be the “**lab rat**”, ...
May the Brave Ones Stay
Basic Information

- instructor: Hsuan-Tien Lin (htlin@csie.ntu.edu.tw)
- office hour: after class or by appointment
- course webpage: https://ceiba.ntu.edu.tw/1021ML announcements, homework, reference handouts, etc.
- mailing list: supported by CEIBA
- discussion forum: supported by CEIBA

update your secondary email address on CEIBA
Enrollment

- at most around 160 in Room 103 of CSIE Building
- readily have 120 now
- new cases: sign up for the univ. lottery first, may add a few more in the third week if space allows
- auditing: welcomed (to sit) only if there is an empty chair

Drop as soon as possible! Give your classmates a chance to be miserable.
Teaching Assistants

Chun-Yen Ho, Chun-Liang Li, Han-Jay Yang
Kuan-Hao Huang, I-An Lin, Yu-Ping Wu

- forum for course/homework material questions: CEIBA
- email for grading questions only: ml2013ta@csie.ntu.edu.tw
- TA Hour for more interactive discussions: see course webpage — starting in the week of 9/23, with rooms to be announced soon

To save TA loads, questions about course/homework materials will only be answered on the forum and/or TA hours.
Learning from Data: A Short Course
Y. Abu-Mostafa (Caltech), M. Magdon-Ismail (RPI), H.-T. Lin (NTU)

- idea initiated during 2008
- 5 chapters, closely needed for the first half of the class
- other draft chapters to be finalized, to be used in the second half of the class
- teaching with the book and suggested reading within the book
Getting the Book to Read

- NTU Library: one reserved copy in the shared course material area
- R536: some shared copies to be read in the room
- Chuan-Hwa Book Company: imported some limited copies of the book
  — Ms. Jen Huang (jen@chwa.com.tw) at 0958-008-962
  — may or may not offer group discounts
- Amazon: main selling channel in the US, but can be expensive/slow for international shipping
  — http://www.amazon.com/gp/product/1600490069
- Bulk order from U.S.: secondary selling channel, usually takes two weeks to arrive — http://amlbook.com
- If the book is not affordable to you: email me (htlin@csie.ntu.edu.tw) and I’ll see how I can help.
Getting Future Draft Chapters to Read

*mechanism: to be announced when needed*

Your Privileges

- learn from the **first draft**
- download the draft **freely**

Your Responsibilities

- discuss actively with me to improve the draft
- **do not distribute the draft**

enrolling in this class means agreeing to the items above
THE Principle

Taking any unfair advantages over other class members is not allowed. It is everyone’s responsibility to maximize the level of fairness.

- eating? fine, but no smells and no noise
- sleeping? fine, but no snoring
- cellphone? fine, but silent mode, and speak outside
- ...

applies to instructor, TAs, students
Honesty

NO CHEATING

NO LYING

NO PLAGIARISM

NO PIRATING of THE BOOK

very serious consequences
Grade

- no midterm, no final
- main reference: homework sets, final project
Collaboration and Open-Book

- homework discussions: encouraged
- but fairness?
  write the final solutions alone and understand them fully
- references (books, notes, Internet): consulted, but not copied from
- no need to lend/borrow solutions

To maximize fairness (everyone’s responsibility), lending/borrowing not allowed
Collaboration and Open-Book

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Deal? If your classmate wants to borrow homework from you, what do you say?
Homework

- students: justify solutions clearly
- TAs: evaluate solutions fairly
- penalty for late parts:
  90% of value for 12-hour late, 80% one-day late, ...

late homework should go to a box in R217
Programming Assignments

- about a third or half of the problems
- any programming language, any platforms
- upload **source code**, otherwise: 10% of value only!
- **no sophisticated packages**

students’ responsibility: ask TA in advance for what can/cannot be used
Important TODOs

- Update your secondary email address on CEIBA!
- Sign the agreement form.
- Do homework 0; post on the forum for questions.
- If you still want to be added, sign the form first (and try to enroll online) and wait for our decisions later.

May the Brave Ones Stay
Questions?