

# Machine Learning

(機器學習)

Course Introduction, 09/09/2013

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# Four Reasons for NOT Taking the Course (1/4)

## 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?( $100 \times 10\text{min} = 16\text{hr}$ ) 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](mailto: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**: `m12013ta@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.**

# THE Book

## *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](mailto: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](mailto: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**



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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?**