## CSIE 5043: Machine Learning

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Course Introduction, 09/19/2011

## Only English

- English teaching
- English homework writing
- English email communications
- English forum discussions
- exception: Mandarin face-to-face discussions

If you are not comfortable with **English-teaching** classrooms, ...

## 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**, ...

## 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 59 to 60? NO.
- Will you tolerate me to turn in my homework 10 minutes late? NO.
- How many will pass? Any, if necessary.

If you do not like a **strict** instructor, ...

## Huge Loads

- from a student taking ML class last year (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 不然出這作業的人眞的很沒良心= =

- 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 and 1 NOW
  - already hard
  - no need to submit homework 0, but need to submit homework 1

If you do not want to spend **so much time on homework**, ...

# 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/1001ML
  announcements, homework, reference handouts, etc.
- mailing list: supported by CEIBA

  **update your secondary email address on CEIBA**

## Enrollment

- at most 98 in Room 102
- readily have 98 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 motivated classmates a chance to be miserable.**

# Teaching Assistants

`ml2011ta@csie.ntu.edu.tw`
**TA Hour: Tuesdays 6:30pm to 7:30pm in R105**

Ku-Chun Chou    Polone Chen    Yu-Cheng Chou    Wei-Yuan Shen

Chun-Yen Ho    Chung-Liang Li    Yi-Hung Huang

**Go to TA hours to discuss with TAs and classmates!**

# THE Book

> *Learning from Data*
>
> Y. Abu-Mostafa (Caltech), M. Ismail-Madgon (RPI), H.-T. Lin (NTU)

- idea initiated during ML2008
- about 5 chapters out of 19 close to finalized, some more drafts coming in this term
- teaching with the book, many homework problems within the book, reading assignments within the book

# More about the Book

*book forum and downloading :* `http://book.caltech.edu`

### Your Privileges

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

### Your Responsibilities

- discuss with RPI students **actively** on the forum
- comment about the book on the forum **bravely**
- **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**

**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
- fine-tune: participation in discussions

## 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

to maximize fairness (everyone's responsibility),
**lending/borrowing not allowed**

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, ...

> **10-min late is 12-hour late**

# Programming Assignments

- about a third or half of the problems
- any programming language, any platforms
- upload <span style="color:red">source code and predictions</span>, 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, and register on the forum (wait for approval).
- Do homework 0 and 1; go to the TA hour 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**

## One More Note on Discussions

- book discussion: `http://book.caltech.edu`
  —English
    - introduce yourself
    - download the sections and discuss
- class discussion: simply use board `learner@ptt2.cc`
  —English
- email discussion: `htlin@csie.ntu.edu.tw` and TAs
  (`ml2011ta@csie.ntu.edu.tw`)
  —English
- face-to-face discussion: office hour with instructor, or TA hour
  —Any language that we know

**Questions?**