NTU 922 U0960: Machine Learning

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Course Introduction, 09/14/2009
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 may 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

- Also from the Taiwanese student taking MIT ML class (translated):
  
  *Every homework set is similar to three normal ones in NTU.*
  *I devoted my whole Mid-Autumn Festival to homework 1.*

- Ours last year: two to three times harder than a normal one in NTU
- Ours this year: three to five times harder than a normal one in NTU
- Around eight homework sets (and a hard final project)
- Homework due within a week
- Even have homework 0
  - Already hard
  - No need to submit

If you do not want to spend so much time on homework, ...
Five Reasons for NOT Taking the Course (5/5)

Experimental Design

- only the second year of this class
- last year: good but always room for improvement
- instructor willing to do experiments:
  - harder homework
  - more loads (reading assignments this year)
  - book writing (we’ll talk about this)
  - board writing and/or slides
  - syllabus
- always risky to be in an experimental class

If you do not want to 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/981ML
  announcements, homework, reference handouts, discussion forum, etc.
- mailing list: supported by CEIBA

Update your secondary email address on CEIBA!
instructor to be **married** in November, may take two weeks off —invited guest lecturer: Prof. Shou-de Lin

instructor is writing a **book** on ML, will request your feedback —we’ll talk more about this
Enrollment

- at most 96 in Room 104
- limited 60 before the second round
- the other 36: my students, Prof. Shou-de Lin’s students, and special cases —send me an email saying why you should be the “special case”
- 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.
Chun-Wei Liu and others (email_to_be_announced)
special TA hour for homework 0: 9/17 (Thursday), noon–2pm, Room TBA
regular TA hour: TBA

Go to TA hours to discuss with TAs and classmates!
Learning from Data
Y. Abu-Mostafa (Caltech), M. Ismail-Madgon (RPI), H.-T. Lin (NTU)

- idea initiated during ML2008
- about 6 chapters out of 19 finished, 4–5 more coming in this term
- teaching with the book, many homework problems within the book, reading assignments within the book
book forum and downloading: http://book.caltech.edu

Your Privileges

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

Your Responsibilities

- discuss with Caltech and RPI students **actively** on the forum
- comment about the on the forum **bravely**
- do not distribute the draft

enrolling in this class means agreeing to the items above
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
- supplementary reference: participation in discussions
Collaboration and Open-Book

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

\textbf{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, ...

10-min late is 12-hour late
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, and register on the forum (wait for approval).
- Do homework 0 and go to the TA hour for questions.
- If you still want to sign up, send me an email first.

May the Brave Ones Stay
book discussion: http://book.caltech.edu
—English
  • introduce yourself
  • download the sections and discuss

class discussion: within https://ceiba.ntu.edu.tw/981ML
—English

email discussion: htlin@csie.ntu.edu.tw and TAs (TBA)
—English

face-to-face discussion: office hour with instructor, or TA hour
—Any language that we know
Questions?