

CMSC 170 - Introduction to Artificial Intelligence

Lab Course Outline

CNM Peralta, RJG Obrero, JCE Plaras, MFB Tandoc

2nd Semester AY 2014-2015

Course Information

Description: Basic principles of Artificial Intelligence; knowledge representation; natural language processing; pattern recognition; and, expert systems.

Prerequisite: CMSC 123

Credit: 3.0

Number of hours: 5 (2 lecture, 3 laboratory)

Lab Topics

1. Review of Java (emphasis on GUI)
2. Brute-force search
3. A* search
4. Naïve Spam Filtering
5. Spam Filter with Laplacian Smoothing
6. K-Nearest Neighbor Classification
7. K-Means Classification
8. Neural Networks (Perceptron)

Grading System

The laboratory will comprise 40% of your total grade in CMSC 170. There will be no project, thus the only source of your lab grade will be exercises (quizzes are accumulated as one exercise).

Course Policies

- **Attendance:** The maximum allowable number of absences is 4. If you exceed 4 absences and most are excused, you will be dropped the course ("grade" of DRP). Otherwise, you will get a grade of 5.0.
- **Exercises:** The **required programming language is Java**. All exercises will be submitted using the LMS. All exercises must be submitted as a **.zip** file (NOT **.rar** or **.7z** or **.tar.gz** or anything else) with the filename, **SurnameEx#.zip** (e.g., **PeraltaEx1.zip**), and containing:
 - The folder (or another **.zip** file) containing all your Java source code.
 - A runnable **.jar** file.

Due to this requirement, it is highly encouraged, but not required, that you use the Eclipse IDE, available for Windows, Linux, and (OMG, such wealth) iOS.

Late Exercises: Late exercises will still be accepted, but score deductions will be given depending on the amount of time that has elapsed since the deadline:

Weeks Late	Deduction
1	10%
2	30%
3	60%
4	100%

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It is easy to see that submitting your exercise four (4) weeks late is hazardous to your grade. Don't do it.

- **Quizzes:** Quizzes may be announced or unannounced and will be given any time. Missed quizzes due to excused absences will be dropped from grade computation or graded 0 otherwise.
- **Use of the Lab:** The lab will be available for use during class hours. **Never leave any of your source code in the lab computers** to lessen the probability that someone else gains access to it and copies it without your consent.
- **Facebook:** Join our Facebook group: CMSC 170 2SAY2014-2015 (ICS, UPLB).
- **LMS:** We will use Google Classrooms. You must log in using your **@up.edu.ph** email address to be granted access to it (normal Google accounts won't work). You will enroll in TWO sections: the lecture section and your lab section.

U (Lecture)		uytrimk	
U-1L	0m1y6l7	U-5L	ip0vqpq
U-2L	i10oom	U-6L	wes6gt
U-3L	jvuo621	U-7L	Proolly dissolved
U-4L	fr5jh9	U-8L	ggt4gj

- **References:** Enumerated below [1,2].

Lab Instructors

Name	Room	Consultation Hours
Kei Peralta	C-114	1-4 Tue, 1-5 Thurs, 1-4 Fri
James Plaras	C-114	1-4 Tue, Thurs & Fri, 10-11 Wed
Froi Tandoc	C-114	9-11 Tue & Thurs, 9-10 Wed & Fri, 1-4 Wed, 4-5 Fri
Jason Obrero	C-112	9-10 Tue-Fri, 1-4 Tue & Thurs

References

- [1] George F. Luger. *Artificial Intelligence: Structures and Strategies for Complex Problem Solving*. Addison-Wesley Publishing Company, USA, 6th edition, 2008.
- [2] Stuart Russell and Peter Norvig. *Artificial Intelligence: A Modern Approach*. Prentice Hall Press, Upper Saddle River, NJ, USA, 3rd edition, 2009.