

WOMEN WHO

SSID: WWCode

Password: password





WOMEN WHO
CODE
MANILA



Machine Learning and AI Study Group

Twitter: @wwcodemanila
FB: fb.com/wwcodemanila

#WWCodeManila
#WWCode.ML.AI
#StudyGroup



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OUR MISSION

Inspiring women to excel in technology careers.



OUR VISION

A world where women are representative as technical executives, founders, VCs, board members and software engineers.



STUDY GROUP

Study groups are events where women can come together and help each other learn and understand a specific programming language, technology, or anything related to coding or engineering.

GUIDELINES

- Study groups are **not** a class/lecture
- If you have a question, just **ask**
- If you have an idea, **share it**
- **Make friends** and learn from your study groupmates
- **Do not** recruit or promote your business

WOMEN WHO

New Member's Introduction





I am <name>

<your current profession>

<why did you join this study group?>

<background in machine learning and AI>

WOMEN WHO **SHOW & TELL**

Finished any previous
exercises or assignment?
Share it!



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TOPIC FOR TODAY

CATEGORICAL DATA



CATEGORICAL DATA

- Classifiers generally accept **numerical input** (discrete, continuous)
- Not all classifiers can process **string input** (e.g. 'Male', 'Female')
- We need a way to convert categorical data into numerical data.

CATEGORICAL DATA

Nominal

- no intrinsic ordering

Hair colour: red, black, blonde

Race: Asian, Hispanic, African

OS type: Chrome, Firefox, IE, Safari

Ordinal

- an ordering exists

Highest attained educational background:

Elementary, High School, College

Military Rank: Captain, Major, Colonel, General

Ratings: Poor, Neutral, Good, Excellent

CATEGORICAL DATA

user ID	education	gender	eye_color
1	Elementary	Female	blue
2	College	Male	brown
3	High School	Female	green
4	College	Male	brown
5	High School	Female	green

Which
features are
ordinal?
nominal?
binary?

HOW TO HANDLE CATEGORICAL DATA?

user ID	education	gender	eye_color. blue	eye_color.brown	eye_color.green
1	0	1	1	0	0
2	2	0	0	1	0
3	1	1	0	0	1
4	2	0	0	1	0
5	1	1	0	0	1

Goal: Find an appropriate mapping of the categorical (string) data to numerical data.

EXERCISES

- **ML beginners:** Start with the ‘Introduction to ML Tutorial’ and work your way up.
- If you haven’t finished an exercise/assignment, try finishing that one first before moving to the next.
- Have a question? Post it here:
<https://gitter.im/WWCodeManila-ML-AI/>
- When you’re done, share your work! :D

Partner/Group/Individual Exercise:

**1. HANDLING CATEGORICAL VALUES
TUTORIAL**

2. ADULT CENSUS INCOME DATASET



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Partner/Group/Individual Presentation

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ASSIGNMENTS

- If you didn't finish the exercise (and other past exercises), you can finish it at home.
- Make sure you submit/share your work when you're done. 😊

T.I.L.

SHARE IT!
In front!

On Twitter: @wwcodemanila
Or FB: fb.com/wwcodemanila

Don't forget to tag WWCodeManila so we can retweet or share it.

Feedback Form

<https://goo.gl/YzSqcS>

Please don't rate the event on meetup.

Not helpful. It is best to just tell your concerns via the feedback form. We are building a community not a Yelp restaurant.

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THANK YOU :)

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