

UMC 301: Applied Data Science and Artificial Intelligence

Naman Mishra

August 2024

Contents

I	Data science / AI	3
----------	--------------------------	----------

The course

Lecture 1.
Friday
August 02

Chapter I

Data science / AI

How does Siri process the query “Show me a good breakfast restaurant near me”?

- (i) Convert speech to text.
- (ii) Understand the semantics of the query (for example, understand keywords like “breakfast”, “restaurant”) and formulate a structured query (place type = restaurant, meal type = breakfast, rating 3–5, distance 0–3 km).
 - Also needs your current location!
- (iii) Search for restaurants filtered by the structure above and rank based on some metric
 - star rating,
 - go through all reviews and understand the sentiments
 - check your own past history, and try to give you a personalized recommendation
 - either recommend similar restaurants,
 - or recommend something completely different with a message like “would you like to try something new?”

or some combination of these (by another model).

An AI system for predicting cricket