

Uncertainty applications

We can not afford to be overconfident in medical applications.

Age	Gender	Height	FVC	Respiratory health
21	M	1.60	5.2	Good
35	M	1.50	4.8	OK
15	F	1.70	3.2	Good
45	M	1.60	2.8	Poor
9	F	1.0	2.2	?

Uncertainty applications

We can not afford to be overconfident in medical applications.

Age	Gender	Height	FVC	Respiratory health
21	M	1.60	5.2	Good
35	M	1.50	4.8	OK
15	F	1.70	3.2	Good
45	M	1.60	2.8	Poor
9	F	1.0	2.2	?

- Deterministic model: “Poor” with 90% probability.

Uncertainty applications

We can not afford to be overconfident in medical applications.

Age	Gender	Height	FVC	Respiratory health
21	M	1.60	5.2	Good
35	M	1.50	4.8	OK
15	F	1.70	3.2	Good
45	M	1.60	2.8	Poor
9	F	1.0	2.2	?

- Deterministic model: “Poor” with 90% probability.
- Probabilistic model: Since the point is OOD, “Good” with 30% probability, “OK” with 30% probability, “Poor” with 40% probability.

Q: You took a course at IITGN where final exam has very high weightage. You gave the exam and it didn't go well. What will be your grade?

Options: (1) 10, (2) 9, (3) 8, (4) 7

Q: You took a course at IITGN where final exam has very high weightage. You gave the exam and it didn't go well. What will be your grade?

Options: (1) 10, (2) 9, (3) 8, (4) 7

Hint: In the previous year, the median grade was 9.