

2018

JULY

21

Week 29

202-163

Saturday

MATHS FOR COMPUTER SCIENCE - I

PROBABILITY AND STATISTICS (HI)

9

TAUGHT BY

10

- prof. girish varma

11

COURSE TOPICS

1. sample spaces

counting

uniform probability

axioms of probability

continuous probability spaces

conditional probability

bayes rule

independence

Sunday 22

2. random variables

PMFs

AUG
2018

S M T W T F S
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5 6 7 8 9 10 11

S M T W T F S
12 13 14 15 16 17 18

S M T W T F S
19 20 21 22 23 24 25

S M T W T F S
26 27 28 29 30 31 *

AUGUST

JULY

23

Monday

2018

Week 30
204-161

discrete probability distributions

multiple random variables

expectation

variance

covariance

3. continuous probability distributions

tail bounds

- markov

- chebyshev

- chernoff

law of large numbers

CLT

4. point estimates for mean and variance

maximum likelihood estimation

JUL
2018

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S M T W T F S
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S M T W T F S
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S M T W T F S
22 23 24 25 26 27 28

S M T W T F S
29 30 31 . . .

2018

Week 30
205-160

JULY

24

Tuesday

• confidence intervals

hypothesis testing

5. bayesian statistics

maximum a posteriori estimation

minimum mean squared error estimation.

TEXT BOOKS

1. introduction to probability; bertsekas.

2. introduction to probability, statistics, and random processes; pichronik.

3. introduction to probability and statistics for engineers and scientists; ross.

4. an introduction to probability theory and its applications; feller.