

- [Foundations of Data Science \(2020–2018\)](#)

## Stochastic processes

### Probability Models

- [Mock Exam1](#)

### Bayesian

- [Mock Exam2](#)
- [y2019p6q7](#)

### Inference

- [Mock Exam3](#)
- [y2020p6q8](#)
  - Inference for significance
    - parametric resampling
    - multiple unknown parameters' MLE
      - use the entire dataset (Multinomial)
    - one-sided test versus a two-sided test, p-value
  - linear vs count-based model

### MC

- [Mock Exam4](#)
- [y2020p6q7](#)
  - Matrix  $P, \pi$ . Detailed balance equations.
  - posterior  $\omega$ , pseudocode
  - posterior confidence interval  $prior_{sample}(F_\omega < 0.025, F_\omega > 0.975)$