EE6617: Detection and Estimation – Theory and Applications in Communications

http://www.cityu.edu.hk/pg/current/course/EE6617.htm
Nature of Course

- Describe the general frameworks in detection and estimation
- Recognize the detection and estimation problems
- Apply the basic tools in detection and estimation to the problems arising in communications
Course Work (50%)
Assessment (50%)

One or more of the following assessment method(s)

- Assignment
- Presentation
- Test
- Mini-project
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**Topics**

- Fundamentals of statistical signal representation
- Detection and estimation theory
- Application to communication system design

![Likelihood Function Surface](image)

Diagram:

- Signal
- Encoder
- Channel
- Decoder
- Error

Diagram shows a process where signal is encoded, transmitted through the channel, and decoded with error handling.
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Reference books

