Massachusetts Institute of Technology
Department of Electrical Engineering and Computer Science

6.432 Stochastic Processes, Detection and Estimation

Recitation 1 Outline

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Contact Information

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Course Information

1. 6.432 is an intensive graduate-level course, and so having a solid background is key. We assume that you have a good grasp of:

   - linear algebra (18.06 or equivalent)
   - signals and systems (6.003, 6.011 or equivalent)
   - basic probability theory (6.041 or equivalent)

   You should expect to devote a significant number of out-of-class hours to the course, and will need to keep up with the reading.

2. Add yourself to the course e-mail list (see information sheet for instructions).

Recitation outline: Review of linear algebra

1. Review of Euclidean vector space $\mathbb{R}^n$ (see §1.A of course notes)

   - Vectors and matrices: notation and properties
   - Orthogonality and linear independence, bases
   - Matrix operations, including determinants and inverses
   - Eigenvalues and eigenvectors, diagonalization

2. Brief introduction to abstract vector spaces (see §1.7 of course notes)

   - Useful examples: $L^2(\mathbb{R})$, $L^2(\Omega)$