Course Notes for EE227C (Spring 2018): Convex Optimization and Approximation

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Instructions for scribes

Please read carefully.

- Each lecture will be scribed by 2–3 students.
- The instructor will typically provide a skeleton of what the notes should contain.
 Students are expected to fill in the content based on their notes from the lecture and available resources.
- Students are required to produce high quality notes, verify correctness of the material, and produce illustrative figures for the content where helpful.
- Figures must be print quality vector graphics included as pdf, following best practices for readability and accessibility. Code must be provided with each figure that accurately reproduces the figure.
- Scribes are required to use latex macros consistently throughout the notes. Look
 at previous notes as a guide. Also, see the list below for common macros that we
 will use.
- Scribes are required to provide references in bibtex format when referring to any external material.
- Please edit only the tex file you were assigned to. If you spot errors in another tex file, please leave a comment for the author via the overleaf comment function.

List of common macros

- Real numbers \mathbb{R} , use \R
- Dimension of Euclidean space, use letter *n* where possible
- Real-valued functions, use letters *f* , *g* , *h*
- Domain $\Omega \subseteq \mathbb{R}^n$ of a function if not all of \mathbb{R}^n , use \domain
- Scalars, use greek letters
- Vectors, use letters u, v, w
- Matrices, use capital letters *A*, *B*, . . .
- For transpose sign \top , use \land trans, e.g., A^{\top}
- Inner products, use \langle and \rangle, or use transposes.
- For code, use the listings package.
- See macros.sty for other available macros.