

# Learning to Be a Reviewer

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# The Role of Reviewers

- Most IEEE journals and conferences are peer-reviewed
  - A paper is reviewed by people who work in related areas and have adequate knowledge of the area
  - Review is conducted anonymously
  - Anonymous Reviewers should provide honest and helpful comments about the paper, and make unbiased and disinterested judgment thereby
  - Being a Reviewer is a voluntary service

# Learning to Be a Reviewer: General

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- Review criteria
  - Same criteria for your own submitted papers
    - Significance
    - Novelty
    - Technical depth
    - Organization and presentation
- Read the paper with these criteria in mind

# Learning to Be a Reviewer: General

- Review criteria example (IEEE Trans. Signal Process.)
  1. Is the topic appropriate for publication in these transactions?  
(Yes)
  2. Is the topic important to colleagues working in the field?  
(Moderately So)
  3. Is the paper technically sound? (Yes)
  4. Is the coverage of the topic sufficiently comprehensive and balanced? (Yes)
  5. How would you describe technical depth of paper? (Appropriate for the Generally Knowledgeable Individual Working in the Field or a Related Field)
  6. How would you rate the technical novelty of the paper?  
(Somewhat Novel)
  7. How would you rate the overall organization of the paper?  
(Satisfactory)
  8. Are the title and abstract satisfactory? (Yes)

# Learning to Be a Reviewer: General

- Review criteria example (IEEE Trans. Signal Process.) (Cont.)
  1. Is the length of the paper appropriate? If not, recommend how the length of the paper should be amended, including a possible target length for the final manuscript. (Yes)
  2. Are symbols, terms, and concepts adequately defined? (Yes)
  3. How do you rate the English usage? (Satisfactory)
  4. Rate the Bibliography. (Satisfactory)
  5. How would you rate the technical contents of the paper? (Good)
  6. How would you rate the novelty of the paper? (Sufficiently Novel)
  7. How would you rate the “literary” presentation of the paper? (Totally Accessible)
  8. How would you rate the appropriateness of this paper for publication in this IEEE Transactions? (Good Match)

# Learning to Be a Reviewer: General

- Hierarchical reading: Get the big picture and then go into details
  - Make comments this way as well
- Proactive reading: Read from your perspective and with your understanding of the topic
  - Besides the beautiful story told in the paper, what related and important issues are left unaddressed?
- Take notes while reading the paper, which will form your submitted Comments

# Learning to Be a Reviewer: Specific



# Learning to Be a Reviewer: Specific

- Review IEEE conference papers
  - Assign scores (1-5) for each criterion (novelty, contribution, etc.)
  - Provide specific comments
  - Review focus is aligned with the purpose of conference publication
  - Give your scores with this in mind
    - Papers with scores of 4 or higher will generally be accepted
    - Papers with scores of 2 or lower will generally be rejected

# Learning to Be a Reviewer: Specific

- Review IEEE journal papers
  - Review style varies
    - Assign qualitative remarks to each criterion (TSP, etc.)
    - Give your recommendation (most)
  - Provide specific comments
  - Review focus is aligned with the purpose of journal publication, i.e., high-quality and significant work

# Learning to Be a Reviewer: Specific

- Review IEEE journal papers (cont.)
  - Give your recommendation with this in mind
    - Minor Revision and Major Revision will, with high likelihood, lead to eventual acceptance
    - Minor Revision or Major Revision should be given if the work is not of sufficient quality for publication, but can be improved to achieve that level (e.g., the insufficiency of quality is due to poor writing)
    - Rejection should be given if the work is not of sufficient quality, which can hardly be improved due to the nature and scope of this work

# Learning to Be a Reviewer: Specific

- Review IEEE journal papers (cont.)
  - Give your recommendation with this in mind (cont.)
    - Some journals (Letters) run binary decisions, and thus a Rejection may be given even if you think the paper falls in the Major Revision category
  - You may need to serve again as the Reviewer for the same paper if it goes into the second-round review