Professor Sherry's Systems Research Paper Evaluation Rubric

Criteria	Expert	Proficient	Apprentice	Novice	Other Comments
Introduction	Clearly identifies and discusses research problem statement	Incomplete discussion of problem statement	Minimal or implicit discussion of problem statement	Problem statement is very implicit, vague, or not discussed.	
	Motivation and benefits of the research are identified and discussed completely.	Motivation or benefits of the research are identified, but not discussed in depth.	Motivation or benefits of the research are not clearly identified.	Motivation or benefits of the research are not identified at all.	
	Solution/insights of the research are well-articulated.	Solution is described but insight /"key idea" is under-developed.	Solution/insights are not well articulated	Solution/insights are poorly articulated or are absent altogether	
	The problem and/or solution is novel: no one has published something similar before.	The problem and solution are an incremental contribution, advancing the state of the art modestly in a well-known area.	The problem and solution effectively reproduce existing results.	The problem and solution are too poorly articulated to evaluate for novelty.	
	"Teaser" results provide a useful summary of "key results"/conclusions of the work.	Some teaser results are provided, but do not provide insight into the key conclusions from the work.	Teaser results provide little insight into the work and its conclusions.	No teaser results are provided.	

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Exposition, Design Discussion, Methodology	Appropriate background is provided for the general systems reviewer who does not have expertise in the subfield.	Most background for the general systems reviewer, but the reviewer is assumed to know too much about the field or prior work.	Some background is provided, but it is insufficient for the general systems reviewer and even a specialist to understand.	Background is haphazard or nonexistent.	
	Solution is scoped relative to related work: "obvious solutions" and competing publications are dismissed with logic, data, or experimental evidence.	Solution is scoped relative to related work and "obvious solutions"; arguments to dismiss alternate approaches are sound but could use more data or evidence/data.	Solution is scoped relative to related work but there may be minor gaps; arguments to dismiss alternate approaches are unconvincing.	Related work / "obvious solutions" if provided, have clear gaps in the literature review; it is unclear why alternate approaches would not have worked just as well.	
	Approach / system design is completely described in sufficient detail for the reader to potentially replicate the work.	Approach / system design is described with only minor gaps in exposition.	Approach / system design is described with a few noticeable gaps in exposition.	Approach / system is described with major missing pieces; it is hard to understand what the approach / system does.	
	Core "design decisions" in developing the work are discussed and the rationale for each "design choice" motivated with logic, data, or experiments.	Core "design decisions" in developing the work are mostly discussed and the rationale for each "design choice" is mostly well-motivated.	Some "design decisions" are called out and the rationale for each "design choice", is present but unconvincing.	"Design decisions" are missing or incomplete, no rationale is provided.	

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Evaluation	Appropriate figures of merit to evaluate the work are identified and motivated.	Appropriate figures of merit are identified but not thoroughly motivated.	Figures of merit are identified but may be incomplete, motivation is lacking.	No figures of merit / inappropriate metrics are used to measured system characteristics.	
	Figures of merit are measured given a comprehensive range of practical parameters / operating conditions.	Figures of merit are measured given some range of parameters / operating conditions.	Figures of merit are measured but parameter space of experiments is limited.	Figures of merit are improperly measured or without consideration of system parameters / operating conditions that impact results.	
	Experimental setup is described sufficiently for a reader to replicate the testbed.	Experimental setup is described but missing a few details needed for replication.	Experimental setup is mentioned but important questions are missing for replication.	Experimental setup is not mentioned or is lacking enough information to judge the validity of the testbed.	
	Conclusions about the core insight of the paper make sense and draw cleanly from the experimental data.	Conclusions about the core insight of the paper make sense and are mostly supported by experimental data.	Conclusions about the core insight of the paper are discussed but results are inconclusive.	Conclusions about the core insight of the paper are confusing, misleading, or nonexistent.	
	Design decisions are evaluated independently; role of each design choice is backed up with experimental data.	Some design decisions are evaluated independently with experimental data.	A design decision is discussed but inconclusively evaluated with experiments.	Role of design decisions in evaluation results is not discussed, confusing, or misleading.	

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Conclusions	Interpretations/ analysis of results are insightful and thoroughly address how they support the key idea / "contribution" of the work. Suggestions for further research in this area are insightful and thoughtful	Interpretations/ analysis of results are sufficient but somewhat lacking in insight; do not as thoroughly address how support the key idea / "contribution" of the work. Suggestions for further research in this area are adequate.	Interpretations/ analysis of results lacking in insight, do not adequately address how they support the key idea / "contribution" of the work. Suggestions for further research in this area are very limited.	Interpretations/ analysis of results severely lacking in and insight, and do not address how they support the key idea / "contribution" of the work. Suggestions for further research in this area are severely limited.	
Writing Quality	Text provides adequate examples and detailed descriptions; reader is never confused by the writing. The writing is concise: every section of text is focused on illuminating the problem, solution, and core goals of the paper. No grammar mistakes.	Text mostly provides examples and detailed descriptions; reader has to re-read a paragraph to "get" the meaning. The writing mostly focuses on illuminating the problem, solution, and core goals on the paper, with a few "tangents" that mostly do not distract the reader. Minor grammar mistakes but still easy to read/understand.	Most descriptions are clear, but some sections are lacking details or example to prevent the reader from understanding. The paper includes a few tangents and sections of text which are unnecessary, leading the reader to become distracted from the core argument of the paper. Poor grammar makes text hard to understand.	Most text is confusing; lacking in details or examples for the reader to follow the texts' meaning. The core arguments of the paper are drowned out by distracting tangents. Poor grammar; text is impossible to understand.	*NB: I do not grade for grammar.*

(v 0.2 / 14 Nov 2018) Adapted from: https://www.cornellcollege.edu/LIBRARY/faculty/focusing-on-assignments/tools-for-assessment/original-research-project-rubric.shtml

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Manuscript Format	The paper uses standard ACM/USENIX/etc formatting	The paper uses a standardized format, but not standard for a systems conference, minor errors in formatting.	The paper uses a standardized format inconsistently.	The paper appears disorganized with inconsistent formatting.	
	Bibliography and citations are formatted according to acm or ieeetr	Bibliography and citations are mostly well-formatted, with a few errors	Bibliography and citations have mistakes, inconsistencies or capitalization errors.	Bibliography and citations are missing authors, have spelling mistakes, or is missing entries.	
	Margins and spacing are neither "squished" (savetrees) nor too large (padding).	Margins and spacing are slightly "squished" (savetrees) or too large (padding).	Margins and spacing are noticed eably "squished" (savetrees)nor too large (padding).	Margins and spacing are extremely "squished" (savetrees) or too large (padding).	
	Figures are easy to read with appropriate labels, font sizes are >= 8pt, figures are appropriate for colorblind readers.	Figures are easy to read for most well-sighed reviewers and include complete labels.	Figures are harder to read and labels are incomplete or confusing.	Figures are hard to read and/or are missing labels.	