

**Review Form 1.7**

Journal Name:	<b>Journal of Advances in Mathematics and Computer Science</b>
Manuscript Number:	<b>Ms_JAMCS_115410</b>
Title of the Manuscript:	<b>UNIFORM ESTIMATES ON LENGTH OF PROGRAMS AND COMPUTING ALGORITHMIC COMPLEXITIES FOR QUANTITATIVE INFORMATION MEASURES</b>
Type of the Article	

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**PART 1: Review Comments**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li><b>1. Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li><b>2. Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li><b>3. Is the abstract of the article comprehensive?</b></li> <li><b>4. Are subsections and structure of the manuscript appropriate?</b></li> <li><b>5. Do you think the manuscript is scientifically correct?</b></li> <li><b>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><b><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p>	<p>1. Yes, this manuscript is important for the scientific community. It presents an analysis of the uniform continuity of Shannon entropy and some of its generalizations, which is significant in the field of information theory and computer science. The findings and conclusions of the article may have practical applications in various areas, including cryptography, signal processing, statistics, and machine learning. Therefore, this work is of interest to researchers and practitioners in the relevant fields.</p> <p>2. The title "Uniform Continuity of the Shannon and Non-Shannon Entropies" accurately reflects the content and focus of the article. It clearly indicates that the manuscript explores the concept of uniform continuity specifically in relation to both Shannon entropy and other entropic measures. Therefore, yes, the title of the article is suitable.</p> <p>3. The abstract of the article provides a succinct overview of the main concepts and findings presented in the manuscript. It introduces the key information metrics under investigation, namely Shannon entropy and Kolmogorov complexity, and mentions their conceptual distinctions. The abstract outlines the investigation into the correlation between Renyi and Havrda-Charvat entropies, as well as the linear inequalities observed for Shannon entropy and Kolmogorov complexity. Additionally, it includes relevant keywords and phrases. Overall, while the abstract is informative, it could benefit from slightly expanding on the significance of the findings and their potential implications for the field. However, considering the brevity required for abstracts, it effectively summarizes the main points of the article. Therefore, it can be considered comprehensive within the constraints of an abstract.</p> <p>4. The manuscript appears to be well-structured with clearly defined subsections, which help to organize the content effectively. Each subsection focuses on a specific aspect of the research, such as the uniform continuity of Shannon entropy and various non-Shannon entropies (Renyi and Havrda-Charvat). The inclusion of proofs for theorems and propositions adds rigor to the analysis. Additionally, the manuscript follows a logical progression from the introduction of concepts to the presentation of results and conclusions. This structure facilitates understanding and allows readers to follow the author's line of reasoning easily. Overall, the subsections and structure of the manuscript seem appropriate for conveying the research findings and supporting arguments effectively.</p> <p>5. Based on the information provided in the manuscript, it appears scientifically sound. The author employs mathematical proofs, theorems, and lemmas to support their arguments and conclusions. The analysis of the uniform continuity of Shannon entropy and non-Shannon entropies seems logically constructed and grounded in established principles of information theory and mathematics. However, without a detailed examination of the mathematical derivations and proofs provided in the manuscript, it is challenging to make an absolute determination of its scientific correctness. Therefore, it is essential for peer review and further scrutiny by experts in the field to validate the accuracy and validity of the research presented in the manuscript.</p> <p>6. The references provided in the manuscript appear to cover a range of relevant sources, including foundational works in information theory and related fields. While some of the references are dated, such as those from the 1960s and 1970s, they likely represent seminal contributions to the topic under investigation. However, it would be beneficial to include more recent references to demonstrate the manuscript's alignment with current research trends and developments in the field of information theory. Including references from the past decade would enhance the comprehensiveness of the literature review and ensure that the manuscript engages with the latest advancements in the field. Additionally, considering the interdisciplinary nature of the research, references from related areas such as machine learning, computational complexity theory, and statistical physics could further enrich the manuscript.</p>	

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	Overall, while the existing references provide a solid foundation for the research, supplementing them with more recent and diverse sources would strengthen the manuscript's scholarly appeal and relevance.	
<b>Minor</b> REVISION comments		
1. <b>Is language/English quality of the article suitable for scholarly communications?</b>	The language and English quality of the article appear to be generally suitable for scholarly communication. The manuscript demonstrates a proficient use of technical terminology and academic writing conventions typical of scientific literature. However, there are some instances of grammatical errors, awkward phrasing, and punctuation issues throughout the text that could be improved for clarity and readability. Additionally, there may be opportunities to refine the writing style to enhance coherence and precision in conveying complex concepts. Overall, while the language quality is acceptable, some minor revisions for grammar, syntax, and style could further enhance the article's effectiveness in scholarly communication.	
<b>Optional/General</b> comments	The manuscript presents a thorough investigation into the uniform continuity of Shannon entropy and non-Shannon entropies, providing valuable insights into their relationships and properties. The inclusion of mathematical proofs and rigorous analysis adds credibility to the research findings.  However, there are areas where the manuscript could be strengthened. Firstly, enhancing the clarity and conciseness of the writing would improve understanding for readers. Additionally, ensuring consistency in notation and terminology throughout the manuscript would contribute to coherence.  Furthermore, expanding the discussion on the practical implications of the research findings and potential applications in relevant fields could increase the manuscript's impact and relevance.  Overall, with some minor revisions and improvements, the manuscript has the potential to make a valuable contribution to the scientific literature on information theory and related disciplines.	

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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