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| Journal Name: | **[Asian Journal of Research in Computer Science](https://journalajrcos.com/index.php/AJRCOS)** |
| Manuscript Number: | **Ms\_AJRCOS\_134936** |
| Title of the Manuscript: | **SOLVING QUADRATIC EQUATIONS WITH COMPLEX COEFFICIENTS & DETERMINING THE SECOND ROOT FOR ANY COMPLEX NUMBER** |
| Type of the Article | Research |

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| **PART 1: Comments** | | |
|  | **Reviewer’s comment**  **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | **Author’s Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This article provides an expression for the square root of the complex number z, in terms of |z| in terms of z, |z|, and the square root of the real nonnegative number (|z|+Re(z))/2. One of the motivations in doing this is to solve the two-degree algebraic equation with constant coefficients. Possible applications in complex analysis and implications in other domains involving complex numbers are also outlined. Two algorithms and the corresponding computer programs are added in the Appendix**.** |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The title seems to be ok. However, instead of “the second root”, it is more precise to write “the square root”. The rest of the title might remain unchanged**.** | Yes, good. Thank you. |
| **Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.** | The abstract is comprehensive**.** | Ok.  This paper presents a definitive solution for expressing the second root (z½ ) of any complex number z as a function of z and ∆½ as a function of ∆ in the context of quadratic equations with complex coefficients. This research has resulted in two direct algorithms and associated software. These algorithms are not only accurate but also exceptionally fast, providing a powerful tool for efficiently determining the second root of any complex number and solving quadratic equations with complex coefficients. This innovative approach addresses a long-standing challenge in the field, significantly contributing to the accuracy and speed of calculations in complex coefficient scenarios either manually or using a programmable computing machine such as smart phones or computers... |
| **Is the manuscript scientifically, correct? Please write here.** | The manuscript seems to be scientifically correct. |  |
| **Are the references sufficient and recent? If you have**  **suggestions of additional references, please mention them in the review form.** | There are sufficient references, and a few of them are recent. |  |
| **Is the language/English quality of the article suitable for scholarly communications?** | The English quality of the article is suitable for scholarly communications. |  |
| **Optional/General** comments |  |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in detail)*  No |  |