Review Report Paper 1: Flexible attribute enriched role based access control model

Report

• Criteria 1: Title and abstract clearly communicates scope and outcome

The title communicates the scope of the paper, but the authors could have been more precise in their phrasing. Calling it "A Hybrid Implementation of ABAC and RBAC" would indirectly informing the reader about their method of implementing these two access controls together.

The abstract does not represent the paper as a standalone document, in that it does not mention what methods are used, or what the results and findings were. Furthermore, it is biased towards the limitations of the RBAC and ABAC models and the solution found in the paper, which becomes clear as the authors never try to disprove their own work. The sum of the aforementioned comments results in an abstract which makes it hard for the reader to independently evaluate the author's work.

• Criteria 2: Novelty/Originality

Several researchers and companies have looked at, and are using, hybrid implementation solutions of RBAC and ABAC. NIST has also been working on a next-generation access control (PM/NGAC), which further develops the ABAC model. Proving that larger organizations are focusing on this topic, in addition to the authors. The solution purposed by the authors seems similar to the aforementioned, which makes me question the novelty of their work.

The paper seems to provide a new model for the implementation of RBAC and ABAC, but the authors do not clearly present or discuss their results. Furthermore, bad writing makes it hard for the reader to fully understand what the authors are suggesting, forcing the reader to interpret the figures for context and meaning.

• Criteria 3: Methodology and data are appropriate for research scope and related to findings

The authors do not have a chapter for methodology, instead, they divide it into two chapters: "Proposed Model" and "Implementation Details". Here they explain the new model and what advantages it has, and how it was implemented. However, the author's bad English grammar and structure makes it hard to follow. Also, the authors could have written more about the methodology to make it easier for others to test their work.

The data supplied with the paper is relevant, but the use of images is excessive. Further, the quality of the images used is granular and the authors might be better of presenting the results in a written format or a table.

• Criteria 4: Quality of the English language (clarity, grammar, spelling, etc.)

The authors demonstrate a lack of grammatical knowledge as well as the vocabulary of the English language, which ruins the professional impression of the paper. Their sentence structure is bad, and at times lacking, making reading the paper a confusing endeavor. The number of grammatical errors makes it hard to understand the author's messages, and in some cases ruins entire chapters, like the "Future work" and "Conclusion" chapters. This again undermines their own work and result. The authors would be well-advised to revise the paper with the English grammar and structure rules in mind to lift the overall quality of the paper and make it more formal.

• Criteria 5: Scientific Content

The authors spend too much time on the introduction and overview of the topic compared to the scientific content in the paper. Removing the images makes it evident that the authors do not discuss the findings

sufficiently. They list their findings but do not spend enough time elaborating and discussing the different implications of them, which leaves the reader with little information to make personal remarks.

• Criteria 6: Paper Structure/Organization

The paper is poorly structured. There are three main pitfalls: (1) Several sentences are too long and hard to understand, (2) some paragraphs start/breaks in the middle of a sentence, and (3) many page breaks/new pages start right after writing the new chapter title or figure reference.

For example, paragraph one and two in chapter I. is divided in the middle of a sentence. A numbered list in chapter III. starts with the first item on the bottom of a column, just to be continued on the top of the next. Further, the listing of tests, requests, and responses in chapter IV. has a similar fault. The same can be said for the header for chapter V. which starts on the bottom of a page, just to have the content appear on the next. The references also seem to have been misplaced by the authors.

• Criteria 7: Completeness

The completeness of the paper is okay, where <u>completeness</u>, in this case, referrers to the <u>conformity between</u> abstract and conclusions as well as the discussion of the research problem. The authors declare that they will provide a model combining RBAC and ABAC in such a way that it eliminates their limitations, which they do. They also provide results showing that the model removes the limitations. However, as they do not discuss the model or result in great detail it makes it hard for the reader to validate and make his or her personal reflections. This, combined with the poor structure, makes the reader question the quality of the result and overall work conducted by the authors.

• Criteria 8: Quality of References

The authors only reference three of their listed references, thus leaving references one-to-seven redundant. The reference format is of varying quality. Some contain the proper items for referencing journals, while others like reference 10, have typos in the title. The authors could also have added links to the articles to aid the reader if he/she wanted to read them.

The average citations of the references¹ are 76,9, where the most cited article was cited 425 times (nr. 9), and the least cited article was cited 4 times (nr. 3). Upon further reading, the age and quality of the articles seem to be of acceptable and trustworthy standards.

• Criteria 9: Clear conclusion

The conclusion poorly repeats the opening statements about popularity and limitations and does not present a clear final word on the issues or the larger implications. They fail to demonstrate the importance of their ideas when writing about the development of a model that overcomes the limitations. Further, their bad writing skills makes reading the conclusion confusing to read and leaves the reader non the wiser afterward.

• Criteria 10: Source of Publication

The paper is published by the Institute of Electrical and Electronics Engineers (IEEE ICICIC - 2017, paper id: 084) which is known to publish scientific content of good quality. Compared to other papers from the same publisher this paper appears to be substandard, thus highlighting the importance of a critical mindset while reading papers, regardless of the publisher's name and reputation.

Review Report (comments)

The overall impression of the paper is that it is poorly written and structured. The English and sentence structuring make it hard to understand what the author is explaining. The scientific content is average and the data is presented in a semi-understandable way. However, the paper does not discuss the results

¹The average is calculated using the citation number listed for the article on Google Scholar.

in-depth and does not include results for all the claims they make. The authors do not manage to give a good conclusion and the work is clearly biased, as the authors never try to disprove their own claims. The sum of the aforementioned criteria paragraphs gives the paper an unprofessional impression, it almost seems like the authors were in a haste, or did not care about the article at all.

Review Report Paper 2: A Feature Selection and Evaluation Scheme for Computer Virus Detection

Report

• Criteria 1: Title and abstract clearly communicates scope and outcome

The title is clear, concise, and follows the common conventions used when naming scientific papers, while effectively stating the purpose and content of the paper. The abstract is well written and clearly communicates the scope, method, and result of the research. This gives an overall positive impression of the paper early on.

• Criteria 2: Novelty/Originality

Virus detection using machine learning is a relatively new concept and the authors are able to demonstrate a new use of features and evaluation for virus detection. The results further support their claims of high detection rates as well as proof of concept in real-world conditions.

• Criteria 3: Methodology and data are appropriate for research scope and related to findings

The methodology and data are well presented by the authors and the reader would be able to conduct a similar experiment, as long as they possess the needed knowledge in machine learning. Furthermore, the data and figures are of high scientific quality and improve the reader's understanding of the experiments and results.

• Criteria 4: Quality of the English language (clarity, grammar, spelling, etc.)

The paper is well written. The well-structured paragraphs and sentences make the paper easy to read and understand. The authors demonstrate a good knowledge of the English language as well as scientific terms, and in doing so they increase the paper's trustworthiness and overall professional impression.

• Criteria 5: Scientific Content

It is a good balance between the introduction, background, and scientific content. The authors do not add excess information or spend too much time explaining the concepts. They state what is necessary to understand the scientific content so the reader can follow along with the discussion and results without being overloaded with irrelevant information.

• Criteria 6: Paper Structure/Organization

A well-structured paper gives the reader the impression that the author is serious and professional. It further implies that the author is comfortable in conducting and presenting research, thus improving the overall impression of the results and recommendations in the paper. This is something the authors of this paper managed to do well.

• Criteria 7: Completeness

The paper answers the research question and claims made in the abstract clearly and further manages to suggest future work based on the findings and conclusion. As a result, there is a clear conformity between the abstract, conclusion, and discussion of the research problem.

• Criteria 8: Quality of References

The references are neatly listed and conform to the general formatting rules of references. The average citations of the references² are 226,7, where the most cited article was cited 1234 times (nr. 4), and the least

²The average is calculated using the citation number listed for the article on Google Scholar.

cited article was cited 5 times (nr. 10, 11), which indicates the quality of the references. Furthermore, the articles span from 1993-2002 which seems reasonable as the paper was published in 2006, at which point the research field was fairly new and newer material might have been scarce.

• Criteria 9: Clear conclusion

The conclusion is well written and summarizes the research problems, methodology, and solutions while demonstrating the importance of their work. The authors also clearly propose future work, thus making it easy for other researchers to continue working on, for example, reducing the false positive rate.

As a final polite gesture, the authors thank the researchers for their help in supplying a data set for their research, which again strengthening the professional impression of the paper.

• Criteria 10: Source of Publication

The paper is published by the Institute of Electrical and Electronics Engineers (IEEE) which is acknowledged in the scientific community for publishing good papers and scientific content. <u>Compared to other papers from this publisher</u>, this paper seems to befit the overall profile of IEEE quite well.

Review Report (comments)

The overall impression is that the paper and the research on which it is based is professionally conducted. It is well written and structured. The authors get to the point, which they portray clearly. The data, tables, and figures included are fitting and adds to the overall quality of the paper. The scientific content and novelty seem to be of a high standard. All of which gives the impression that the authors are dedicated and professional in their work and value quality.