Tarih: 10-04-2019 [00:08:34 +03]
Kimden: ieeeiscc2019-chairs@edas.info
Kime: Tugrul Yatagan <yatagan@itu.edu.tr>, Sema Oktug <oktug@itu.edu.tr>
Konu: [IEEE ISCC 2019] Your paper #1570531648 has been accepted

Dear Mr. Tugrul Yatagan,

Congratulations! Your paper #1570531648 ("Smart Spreading Factor Assignment for LoRaWANs") has been accepted as a regular paper for presentation at the IEEE ISCC 2019.

This year we received almost 400 submissions and the review process was very competitive.

Reviews are reported below and can be also found at https://edas.info/showPaper.php?m=1570531648, using your EDAS user name yatagan@itu.edu.tr. We kindly ask you to revise your paper accordingly and consider the feedback from the reviewers.

Please notice that in the next few days the publication chair will send you further information about the deadline for the submission of the final version (most likely April 30th), as well as the guidelines the link for submission, and the registration fees.

Note that as a regular accepted paper, you are allowed to have 6 pages. An additional page can be purchased for US$ 120.

IMPORTANT: **No-Show Policy**
The organizers of IEEE ISCC 2019 as well as attendees expect accepted papers to be presented at the conference by an author of that paper. A paper not presented or presented by a non-author without prior written approval by the TPC Chairs will be removed from the final conference proceedings before uploading to IEEE XploreÂ®. No refund will be made to authors of these papers.

We look forward to meeting you all in Barcelona!

Best regards,

Azzedine Boukerche and Michela Meo
TPC Co-Chairs for IEEE ISCC 2019

======= Review ISCC 1 =======

*** Relevance: How would you rate the relevance of this paper to the conference?

perfect match (4)

*** Novelty: How original the problem and/or solution method is.

Highly novel (3)

*** Significance: Importance and practicality of ideas in the paper.

Highly significant and practical (3)

*** Quality of Presentation: How well the paper is written.

Well written (3)

*** Weaknesses: What are the most important reasons NOT to accept the paper? [Please be brief and precise.]

I only suggest the minor not mandatory changes if possible.
1) Reducing the size of Figure 2 in order to save a few space.
2) Use the saved space in order to add a few additional most recent related works.
3) Enlarge labels in Figure 3.
4) Add a few sentences about future work.

*** Strengths: What are the major reasons to accept the paper? [Please be brief and precise.]

The interest around the promising LPWAN technology is obvious. The scientific merit of this paper is clear. The paper is well organized and the description of contents is fluent.

*** Detailed comments: Provide detailed comments that will be helpful to the TPC for assessing the paper, as well as useful feedback to the authors. Please attempt to avoid "stock phrases" or generic comments.

The paper focuses on the promising LPWAN technology. In particular, a simulation environment to evaluate the performance of SF assignment schemes is implemented. Furthermore, a novel smart SF assignment strategy which utilizes Support Vector Machine (SVM) and Decision Tree Classifier (DTC) machine learning techniques for optimization of SF assignment is proposed. It is observed and presented that the proposed smart SF assignment
techniques give promising simulation results in terms of packet delivery ratio (PDR).

The interest around the promising LPWAN technology is obvious. The scientific merit of this paper is clear. The paper is well organized and the description of contents is fluent.

I only suggest the minor not mandatory changes if possible.
1) Reducing the size of Figure 2 in order to save a few space.
2) Use the saved space in order to add a few additional most recent related works.
3) Enlarge labels in Figure 3.
4) Add a few sentences about future work.

*** Recommendation: Your overall rating of the paper.

Strong Accept (5)

======= Review ISCC 2 =======

*** Relevance: How would you rate the relevance of this paper to the conference?

quite relevant (3)

*** Novelty: How original the problem and/or solution method is.

Not novel (1)

*** Significance: Importance and practicality of ideas in the paper.

Not significant or practical (1)

*** Quality of Presentation: How well the paper is written.

Could use improvement (2)

*** Weaknesses: What are the most important reasons NOT to accept the paper? [Please be brief and precise.]

The most parts in the paper present the background of LoRa and LoRaWAN, only half of the page discuss the propsoed SF assignment. The novelty is limited.

The adopting of SVM and DTC utilizes end-to-end tools, the contribution is limited.

The propsoed model did not dicusss the training dataset and experiment data set and the training process. The functioning of the model is doubted.

The exeriment shows a 70% prediction accuracy, which may not suggest an effective prediction performance.

*** Strengths: What are the major reasons to accept the paper? [Please be brief and precise.]

In this work, a simulation environment to evaluate the performance of SF
assignment schemes is implemented. Furthermore, a smart
SF assignment strategy which utilizes Support Vector Machine
(SVM) and Decision Tree Classifier (DTC) machine learning
techniques.

*** Detailed comments: Provide detailed comments that will be helpful to the TPC for assessing the paper, as well as useful feedback to the authors. Please attempt to avoid "stock phrases" or generic comments.

1. The paper tries to utilize ML methods to assign SF. However, only half of the page is on the proposed model. Details such as how to adapt SVM and DTC are missing.

2. It is not clear why ML methods are used for SF assignment and how the predicted values can help to improve such assignments. Given that many works have been done regarding SF and LoRa, the difference of this work and others should be discussed.

3. It is not clear what data set is used for training and what dataset is used for experiment.

4. Also, the training process is not clearly discussed such as the definition of classifer, how to label, why select the lowest possible SF and when to stop.

5. The prediction accuracy is around 70% in 1000 nodes, for SVM and decision tree, which may not suggest an effective prediction performance.

*** Recommendation: Your overall rating of the paper.

Weak Reject (2)

======= Review ISCC 3 =======

*** Relevance: How would you rate the relevance of this paper to the conference?

quite relevant (3)

*** Novelty: How original the problem and/or solution method is.

Somewhat novel (2)

*** Significance: Importance and practicality of ideas in the paper.

Somewhat significant and practical (2)

*** Quality of Presentation: How well the paper is written.

Could use improvement (2)

*** Weaknesses: What are the most important reasons NOT to accept the paper? [Please be brief and precise.]

no major weaknesses are present in this paper. The overall of the paper is solid. The performance of the smart SP could be compared with other methods or techniques. Also the authors could provide a reason why to choose SVM as their machine learning technique rather than many other solutions.

*** Strengths: What are the major reasons to accept the paper? [Please be brief and precise.]

Authors proposed a smart assignment scheme using SVM and DTC to optimize the spreading factor of wide area network.
The paper is sound and well written. Simulation environment and performance is well structured and evaluated.

*** Detailed comments: Provide detailed comments that will be helpful to the TPC for assessing the paper, as well as useful feedback to the authors. Please attempt to avoid "stock phrases" or generic comments.

Authors proposed a smart assignment scheme using SVM and DTC to optimize the spreading factor of wide area network.
The paper is sound and well written. Simulation environment and performance is well structured and evaluated.

*** Recommendation: Your overall rating of the paper.

Weak Accept (4)

======= Review ISCC 4 =======

*** Relevance: How would you rate the relevance of this paper to the conference?

perfect match (4)

*** Novelty: How original the problem and/or solution method is.

Somewhat novel (2)

*** Significance: Importance and practicality of ideas in the paper.

Somewhat significant and practical (2)

*** Quality of Presentation: How well the paper is written.

Could use improvement (2)

*** Weaknesses: What are the most important reasons NOT to accept the paper? [Please be brief and precise.]

Sections 2 and 3 are too long for the background information.

Section 4 (related work) should definitely discuss the current state of the art the proposed solution.

Please discuss the reasons for assigning the parameter values in the Simulation section (Section 7)?

*** Strengths: What are the major reasons to accept the paper? [Please be brief and precise.]

Proposal of a simulation environment to evaluate the performance of SF assignment schemes, and a novel smart SF assignment strategy based on Support Vector Machine (SVM) and Decision Tree Classifier (DTC) machine learning techniques for optimization of the SF assignment.

Evaluation of the proposed scheme in a real-time scheduled.

*** Detailed comments: Provide detailed comments that will be helpful to the TPC for assessing the paper, as well as useful feedback to the authors. Please attempt to avoid "stock phrases" or generic comments.

This work proposes a simulation environment to evaluate the performance of SF assignment schemes, and a novel smart SF assignment strategy based on Support Vector Machine (SVM) and Decision Tree Classifier (DTC) machine learning techniques for optimization of the SF assignment.

In my opinion, Sections 2 and 3 are too long for the background information.

Section 4 (related work) should definitely discuss the current state of the art the proposed solution.

Why does the simulator only cover the LoRaWAN Class A devices?

Please discuss the reasons for assigning the parameter values in the Simulation section (Section 7)?

*** Recommendation: Your overall rating of the paper.

Weak Accept (4)