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[IEEE WCNC 2019] Decision on your paper #1570501625 ('Dribble: a learn-based timer scheme selector for mobility management in IoT')

1 message

ieeewcnc2019-chairs@edas.info <ieeewcnc2019-chairs@edas.info>   Fri, Jan 18, 2019 at 7:37 AM
Reply-To: ieeewcnc2019-chairs@edas.info
To: "Bruno P. Santos" <bruno.ps@dcc.ufmg.br>, Paulo Henrique Rettore <rettore@dcc.ufmg.br>, "Luiz F. M. Vieira" <lfvieira@dcc.ufmg.br>, "Antonio A.F. Loureiro" <loureiro@dcc.ufmg.br>

Dear Mr. Santos,

Congratulations! We are pleased to inform you that your paper #1570501625, 'Dribble: a learn-based timer scheme selector for mobility management in IoT', has been accepted to the Track 3 – Wireless Networks of the IEEE WCNC 2019 conference to be held in Marrakech, Morocco, from 15-18 April 2019.
The conference received a very high number of submissions and was thus very competitive. Each paper was carefully peer-reviewed by at least three reviewers and/or TPC members. The reviews for your paper are given below and can also be found at https://edas.info/showPaper.php?m=1570501625. Please, read and act on these important reviews:

Paper Revision and Final Manuscript
The track chairs will check that you revised your paper incorporating the reviewers' comments. ComSoc prohibits changes to the list of authors once a paper has been submitted. The final manuscript, limited to 8 pages (pages exceeding 6 are subject to additional fees), is due by 5 February 2019. More details on preparing the final manuscript will be available on https://wcnc2019.ieee-wcnc.org/authors/final-paper-submission-guidelines.

Paper and Conference Registration
In order for your paper(s) to be published in the IEEE WCNC 2019 Conference Proceedings and IEEE Xplore, an author (including students) of an accepted paper is required to register for the conference at the Full or Limited (member or non-member) rate on or before 5 February 2019. For authors with multiple accepted papers, one Full or Limited Registration is valid for up to 3 papers from the same author. The registration fees will be available on http://wcnc2019.ieee-wcnc.org/registration.

Presentation by Author Required
Please note that starting 2013, ComSoc has instituted a new policy that a paper must be presented by an author of the paper. Delegating the paper presentation to a non-author colleague is not admissible. Non-adherence to this policy will result in the paper being dropped from IEEE Xplore. Please make sure that you obtain all visa, travel preparations, etc., in a timely manner, as it is the responsibility of the authors to ensure presentation by one of them.

Student Travel Grant Information
Student authors of accepted papers at IEEE WCNC 2019 are qualified to apply for student travel grants which are sponsored by the IEEE Communication Society. Relevant information will be posted at http://wcnc2019.ieee-wcnc.org/student-travel-grant.

Once again congratulations! We look forward to your participation in WCNC'19, and to seeing you in Marrakech in April 2019.

Sincerely,
Track Chairs & TPC Chairs
IEEE WCNC 2019

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======= Review 1 =======

> *** Strong Aspects: Comments to the author: What are the strong aspects of the paper?

* the subject matter of the paper is among the hot research topics for 5G & beyond. the paper describes the gap (problem formulation), supported by sufficient analysis and simulation results. The paper is readable even for those without expert-level background.

> *** Weak Aspects: Comments to the author: What are the weak aspects of the paper?

* authors can broaden their work, reflect better facts that they already explored, and support their claims. some guidelines have been given below.

> *** Recommended Changes: Recommended changes. Please indicate any changes that should be made to the paper if accepted.

*it is suggested that authors discuss the effect of the topology change, the proposed method, and applying the learn-based method on the ease of deployment in real networks from the aspect of "protocol layers". e.g., for doing so, do we need to modify anything on the other layers of the protocol stack?e.g., adding any mechanism to PHY-layer, etc. Some high level comments would be very interesting.

*authors need to comment that their devised method is most appropriate/effective for which class of network typologies as a default (rather than random topology); and what range/scale of network size. Is it appropriate/effective way for small-scale sensor networks? And/or is it applicable to adopt it to a network of large size with hundreds of nodes (that most probably need some centralized coordination)?

*authors need to extend their discussions on the reason behind the chosen mobility metrics (in simulation tool).

*authors need to clarify the definition of confusion matrices, and elaborate on the details of the values shown in Fig. 4.

*in order to make the paper more interesting for the readers, it is suggested that the authors directly bridge the main challenge & evaluations of the paper with the state-of-the-art technolgies for 5G & beyond. For example:
1. using the transmission method proposed in the following paper cuts down the transmission of additional information to convey the control signaling overhead in MTC/IoT. They load this control info on actual info to reduce delay and improve other KPIs. Hence, this can be used on top of this work for improving control overhead & disconnection time. In addition, since its based on fountain transmissions, it will improve the overhearing transmsissions (as in Fig. 6).
K. Nikitopoulos, et al., "Space-Time Super-Modulation: Concept, Design Rules, and Its Application to Joint Medium Access and Rateless Transmission," IEEE Trans. Wireless Commun., vol. 16, no. 12, pp. 8275-8288. Dec. 2017

2. Another interesting subject that can be discussed is about the ease of adapting the proposed method for the standards that are going to support future IoT, e.g., see
V. Gazis, et al., "A survey of standards for machine-to-machine and the internet of things," IEEE Commun. Surveys & Tut., vol.19, no.1, pp. 482-511, First Quarter 2017.
3. Last but not least, including other open issues in this micro research thread, including Handover latency (as it maybe needed in some large scale IoT networks), etc. see paper below for example
M. B. Yassein, et al., "Mobility management of Internet of Things: Protocols, challenges and open issues," in Proc. ICEMIS, May 2017.

> *** Relevance and Timeliness: Rate the importance and timeliness of the topic addressed in the paper within its area of research.
Good. (4)

> *** Technical Content and Scientific Rigour: Rate the technical content of the paper (e.g.: completeness of the analysis or simulation study, thoroughness of the treatise, accuracy of the models, etc.), its soundness and scientific rigour.
Solid work of notable importance. (4)

> *** Novelty and Originality: Rate the novelty and originality of the ideas or results presented in the paper.
Significant original work and novel results. (4)

> *** Quality of Presentation: Rate the paper organization, the quality of text, English, and figures and the completeness and accuracy of references.
Well written. (4)

======= Review 2 =======

> *** Strong Aspects: Comments to the author: What are the strong aspects of the paper?

This paper propose Dribble, a learn-based timer scheme selector.It can manage topology changes caused by mobility in the IoT context.The structure of the paper is clear and distinct

> *** Weak Aspects: Comments to the author: What are the weak aspects of the paper?

The result lacks a quantitative measure of performance for performance improvement.

> *** Recommended Changes: Recommended changes. Please indicate any changes that should be made to the paper if accepted.

Add quantified results description in the conclusion.

> *** Relevance and Timeliness: Rate the importance and timeliness of the topic addressed in the paper within its area of research.
Acceptable. (3)

> *** Technical Content and Scientific Rigour: Rate the technical content of the paper (e.g.: completeness of the analysis or simulation study, thoroughness of the treatise, accuracy of the models, etc.), its soundness and scientific rigour.
Valid work but limited contribution. (3)

> *** Novelty and Originality: Rate the novelty and originality of the ideas or results presented in the paper.
Some interesting ideas and results on a subject well investigated. (3)

> *** Quality of Presentation: Rate the paper organization, the quality of text, English, and figures and the completeness and accuracy of references.
Well written. (4)

======= TPC Review 3 =======

> *** TPC Recommendation: Given the reviews, what is your recommendation for this paper.
Borderline (3)

> *** TPC Summary: Please give a justification for your recommendation, especially if the review scores vary widely or if your recommendation differs significantly from those of the reviewers.

This paper studies the discovery scheme for topology changes. In general, the topology change is found by advertisement timer schemes, and most timer schemes use a homogenous timer. This paper proposes to use personalized timer schemes for users with different mobility patterns.

The idea is interesting, and the simulation indicates good performance. Several comments are as follows.

1. While the benefit of personalized timer schemes is shown, the drawback is unknown, e.g., does they require more control packets or more information.
2. The mapping from mobility patterns to timer schemes is done by a "network specialist", which seems quite difficult to generalize.
3. Dribble uses leaning models, which seems computation extensive. And it is located at the operator. On the other hand, IoT may prefer decentralized schemes. The cooperation should be discussed more deeply.