



Amir Rahmani &lt;amirr1@uci.edu&gt;

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**Fwd: DATE 2018: Your Submission (Number 515): Accepted as Interactive Presentation Paper**

1 message

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**Bryan Donyanavard** <bdonyana@uci.edu>

Fri, Nov 10, 2017 at 8:39 PM

To: Nikil Dutt &lt;dutt@ics.uci.edu&gt;, Tiago Mück &lt;tmuck@uci.edu&gt;, Amir Rahmani &lt;amirr1@uci.edu&gt;, kasra moazzemi &lt;moazzemi@uci.edu&gt;

Reviews from DATE...they are all pretty brief and mostly positive. I'll create a new version of the paper and start making modifications to cut down to 4 pages.  
-Donny

----- Forwarded message -----

From: &lt;acoskun@bu.edu&gt;

Date: Fri, Nov 10, 2017 at 7:03 AM

Subject: DATE 2018: Your Submission (Number 515): Accepted as Interactive Presentation Paper

To: [bdonyana@uci.edu](mailto:bdonyana@uci.edu)Cc: [papers@date-conference.com](mailto:papers@date-conference.com)

Dear Bryan Donyanavard,

On behalf of the Technical Program Committee, I am delighted to inform you that your submission to DATE 2018

Title: Gain Scheduled Control for Nonlinear Power Management in CMPs

Authors: Bryan Donyanavard, Amir M. Rahmani, Tiago Muck, Kasra Moazzemi and Nikil Dutt

Number: #515

has been accepted as an "Interactive Presentation" paper at the conference, with a corresponding (max.) 4-page paper in the proceedings.

Congratulations for this success!

An Interactive Presentation (IP) implies that you need to present your work with an A0-format poster. You will also announce your work via at most 2 slides in a 1-minute presentation, which will be schedule at the end of a regular session.

The selection process was very competitive. Indeed, the acceptance rate of regular papers is 23.7%. Cumulative acceptance rate for all regular papers and IPs is 35% of the submitted papers.

The acceptance of your paper for DATE 2018 comes with the following duties for you:

1. Preparation of camera-ready final manuscript
2. Registration to the conference

3. Preparation of a PowerPoint presentation
4. Actual delivery of your presentation at DATE 2018.

These duties are detailed below.

We now consider that you/your co-authors are committed to present the paper at the conference. We reserve the right to discard the paper from the proceedings if none of the authors/co-authors registers and presents the paper at the conference.

#### 1. Preparation of camera-ready manuscript and forms

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Please prepare a final camera-ready manuscript by NOVEMBER 30, 2017.

This manuscript will be included in the DATE 2018 Proceedings; papers will also be assigned a DOI and indexed in IEEE Xplore. There is a strict maximum of 4 pages; please note that it is NOT possible to purchase additional pages in DATE.

The Technical Program Committee worked very hard to thoroughly review all submitted papers. Reviewers' results and comments suggesting improvements to your paper are attached to this email. Please take them into consideration in preparing your final manuscript. Please note that this year the overall score ranges from -3 to +3.

Please prepare and submit your manuscript according to the instructions available at:

<https://www.date-conference.com/author-guidelines>

The camera-ready submission form will open on November 20, 2017.

#### 2. Registration to the conference

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One full conference registration (at speaker/member rate) is required per accepted paper, regardless of whether the only attendee/presenter is a student (in which case the student rate registration will not qualify), also by NOVEMBER 30, 2017.

The registration to the conference is solely possible online via the online registration platform, which is now open:

<https://www.date-conference.com/registration>

A VISA letter can be requested during the online registration process (full payment of the registration fees is required).

#### 3. Preparation of a PowerPoint presentation

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Please prepare your PowerPoint presentation (maximum 2 slides) and upload it at the conference website by March 16, 2018, 19:00:00 CET.

Detailed instructions for the preparation and upload of your presentation is available here:

<https://www.date-conference.com/av-guidelines/>

#### 4. Actual delivery of your presentation at DATE 2018

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You (or one of your co-authors) are expected to come to DATE 2018 in Dresden, Germany, and deliver your short advertisement talk (1 minute) in the assigned session slot, followed by your interactive presentation in the allocated IP session.

Soon the full conference program (including your one-minute presentation in a regular conference session and your IP session) will be published on-line at

<https://www.date-conference.com>.

On our website, you will also find information on how to reach Dresden, the conference venue, and hotels in the neighborhood.

Congratulations once again for the acceptance of your paper at DATE 2018!

I am looking forward to meeting you at DATE 2018 in Dresden from March 19 to 23, 2018!

Kind regards,

Ayse Kivilcim Coskun  
DATE 2018 Program Chair  
[papers@date-conference.com](mailto:papers@date-conference.com)  
<http://www.date-conference.com>

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DATE 2018 Reviews for Submission #515  
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Title: Gain Scheduled Control for Nonlinear Power Management in CMPs  
Authors: Bryan Donyanavard, Amir M. Rahmani, Tiago Muck, Kasra Moazzemi and Nikil Dutt

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REVIEWER #1  
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Reviewer's Scores  
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Overall Value: 1

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Summary of ideas  
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This paper proposes a non-linear controller called GSC to overcome the bottleneck if linear controllers such as PI are used for DVFS. It combines 4 linear controllers and their respective gains to achieve this, while selecting the best of the linear controller for each specific execution phase.

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Strong points  
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It is an interesting idea – and the paper is written in understandable way.

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Weak points  
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Very simple idea, thus more suited to be presented as an IP.

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REVIEWER #2

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Reviewer's Scores

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Overall Value: 2

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Summary of ideas

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The paper proposes a nonlinear DVFS power management approach using an adaptive control theoretical technique called Gain Scheduling.

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Strong points

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In general, the paper is good readable and easy to follow. The abstract summarize brief the main content of the paper and describes besides the outcome of the results. The introduction shows well the benefit of the investigated topic. The contribution is well structured. The authors explain clearly the adaptive control theoretical technique. The authors compare their results with different experiments.

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Weak points

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A more detailed comparison to other related works is missing.

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REVIEWER #3

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Reviewer's Scores

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Overall Value: 1

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**Summary of ideas**

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The paper presents a power control policy for systems presenting a non-linear frequency-voltage relationship

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**Strong points**

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Very interesting and effective solution applied to solve a concrete issue in a real board

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**Weak points**

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the idea seems quite simple and limited. so it is discussed very quickly in few space. the rest of the text is a quite rambling, long and verbose discussion. I suppose the idea can be presented in 4 pages summarizing rambling text.

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**Other comments**

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\* It is not clear to me which is the message of figure 5: the two different control strategies produces almost the same kind of graph... they look quite the same; how does this image demonstrate that the proposed controller better than the classical one?

\* please specify the used version of linux

\* do consider that the frequency-voltage relationship is generally linear in classical systems and not the frequency-power one. please refine and improve the text

\* add the label to y axis in figure 3

\* figure 3 is not clear. please describe it better.

\* figure 4 is general. please specialize it in the considered scenario

\* two different solutions presented in figure 5 seem to obtain not a too different behavior.

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REVIEWER #4

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**Reviewer's Scores**

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Overall Value: -1

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**Summary of ideas**

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The paper presents a nonlinear controller for managing DVFS, reducing power consumption and better controlling the system. The approach is implemented as a Linux process for the ODROID platform.

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**Strong points**

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- The approach has been rigorously presented from the control theory perspective and evaluated on a real platform.
- Response time is effectively improved

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**Weak points**

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- I don't see significant benefits in terms of energy savings for applying such a controller. Which is the end-user benefit from using the proposed solution.
- The authors should discuss more about accuracy. Results in Table II are not clear and should be better described.

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DATE 2018 - <https://www.softconf.com/date18/conference>