LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : *PROSIDING*

Judul Karya Ilmiah (paper)	:	Implementation of Optimization Technique on the Embedded Systems and Wireless Sensor Networks for Home Energy Management in Smart Grid
Jumlah Penulis	:	4 orang
Status Pengusul	:	~~Penulis Mandiri~~ / Penulis Pertama/~~Penulis ke..../~~Penulis Korespondensi.
Identitas Prosiding	:	a. Judul Prosiding : 2016 IEEE Conference on Wireless Sensors (ICWiSe) b. ISBN / ISSN : 978-1-5090-1626-6 c. Tahun Terbit, Tempat Pelaksanaan : 2016, Langkawi, Malaysia d. Penerbit / organiser : IEEE e. Alamat repository PT / Web prosiding : http://eprints.itn.ac.id/5324/1/Aryu%20Proceeding%202016-1%20Implementation%20of%20Optimization.pdf https://ieeexplore.ieee.org/document/8187757 f. Terindeks di (jika ada) : IEEE Xplore

Kategori Publikasi Makalah (beri √ pada kategori yang tepat : [√] *Prosiding* Forum Ilmiah Internasional [ ] *Prosiding* Forum Ilmiah Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai .....5)	Nilai Maksimal Prosiding .....6)		Nilai Akhir Yang Diperoleh .....7)
	Internasional [√]	Nasional [ ]	
a. Kelengkapan unsur isi paper (10 %)	2,5		2,4
b. Ruang lingkup dan kedalaman pembahasan (30 %)	7,5		7,2
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30 %)	7,5		7,2.
d. Kelengkapan unsur dan kualitas penerbit/prosiding (30 %)	7,5		7,2
Total = (100%)	**25**		24
Nilai Pengusul = Sbg. penulis pertama & korespondensi 0.6 × 24			14,4

Komentar Peer Reviewer

a. Kelengkapan dan keseuaian unsur : memadai
b. Ruang lingkup & kedalaman pembahasan: cukup memadai.
   - pembahasan Optimasi HEMS menggunakan
   - metode algoritma MILP pd sistem embeded.
c. Kecukupan dan kemutahiran data/informasi dan metodologi:
   - cukup banyak Ref. Journal.
d. Kelengkapan unsur dan kualitas terbitan prosiding:
   - terindeks pd. prosiding IEEE.
e. Indikasi Plagiasi:
   - Tidak ada indikasi plagiasi
f. Kesesuaian bidang ilmu : sesuai bidang ilmu.

Malang, 25 Pebruari 2021
Reviewer 2,

Prof. Dr. Eng. Ir. I Made Wartana, MT
NIP/NIDN.: 196105031992021001/ 0003056101
Unit kerja : . Prodi Teknik Elektro.
Fakultas Teknologi Industri
Institut Teknologi Nasional Malang.
Jabatan Terakhir : Guru Besar
Bidang Ilmu : Teknik Elektro

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : *PROSIDING*

Judul Karya Ilmiah	:	Implementation of Optimization Technique on the Embedded Systems and Wireless Sensor Networks for Home Energy Management in Smart Grid
Jumlah Penulis	:	4 orang
Status Pengusul	:	Penulis Pertama
Identitas Prosiding	:	a. Judul Prosiding : 2016 IEEE Conference on Wireless Sensors (ICWiSe) b. ISBN / ISSN : 978-1-5090-1626-6 c. Tahun Terbit, Tempat Pelaksanaan : 2016, Langkawi, Malaysia d. Penerbit / organiser : IEEE e. Alamat Web prosiding: https://ieeexplore.ieee.org/document/8187757 f. Terindeks di : IEEE Xplore

Kategori Publikasi Makalah : [√] *Prosiding* Forum Ilmiah Internasional
(beri √ pada kategori yang tepat : [ ] *Prosiding* Forum Ilmiah Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir Yang Diperoleh
	Internasional [√]	Nasional [ ]	
a. Kelengkapan unsur isi paper (10 %)	1,5		1/15
b. Ruang lingkup dan kedalaman pembahasan (30 %)	4,5		4
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30 %)	4,5		4,5
d. Kelengkapan unsur dan kualitas penerbit/prosiding (30 %)	4,5		4,5
Total = (100%)	**15**		14,5
Nilai Pengusul =			

Komentar Peer Reviewer

a. Kelengkapan dan keseuaian unsur :.....
   - Kelengkapan cukup. Mudah dimengerti.
   - .....
b. Ruang lingkup & kedalaman pembahasan: .....
   - Kebica membahas opt. technique cukup detil, misalnya terkait dgn
   - .....
c. Kecukupan dan kemutahiran data/informasi dan metodologi:
   - Cukup mutakhir.
   - .....
d. Kelengkapan unsur dan kualitas terbitan prosiding: .....
   - Prosidingnya bagus, karena
   - IEEE.
e. Indikasi Plagiasi: .....
   - Tidak ada indikasi plagiasi.
   - .....
f. Kesesuaian bidang ilmu : .....
   - Sangat sesuai.
   - .....

Malang, 16 Maret 2021
Reviewer 1,

Prof. Dr.Ir. Adi Soeprijanto, M.T.
NIP : 196404051990021001
Unit kerja : Departemen Teknik Elektro ITS Surabaya
Jabatan Terakhir : Guru Besar
Bidang Ilmu : Teknik Elektro

Gmail Aryuanto Soetedjo <aryuanto@gmail.com>

[ICWiSe 2016] Your paper #1570294224 ('Implementation of Optimization Technique on the Embedded Systems and Wireless Sensor Networks for Home Energy Management in Smart Grid')

3 messages

aselamat@utm.my.edas.info <aselamat@utm.my.edas.info> Sun, Sep 4, 2016 at 7:56 AM
Reply-To: aselamat@utm.my
To: Aryuanto Soetedjo <aryuanto@gmail.com>, Abraham Lomi <abraham@itn.ac.id>, Yusuf Ismail Nakhoda <yusuf_nakhoda@yahoo.com>

Dear Dr. Aryuanto Soetedjo:

After careful review of your submission, your paper #1570294224 ('Implementation of Optimization Technique on the Embedded Systems and Wireless Sensor Networks for Home Energy Management in Smart Grid') for ICWiSe2016 has been ACCEPTED WITH MINOR REVISION and will be considered for publication in ICWiSe2016 proceeding if the following revisions are successfully implemented:

The reviews are below or can be found at http://edas.info/showPaper.php?m=1570294224, using your EDAS login name aryuanto@gmail.com.

======= Track Chair 1 =======

> *** Comments: Please add your comment if applicable.

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

> *** Strengths/Weakness: What are the major reasons to accept/reject the paper? [Be brief.]

The paper extended related work on using MILP (Mixed Integer Linear Programming) to solve load scheduling optimization problem in Home Energy Management System (HEMS). External open source library called COIN-OR Branch-and-Cut MIP Solver was used in the implementation.

Strength:
Preliminary work with acceptable findings and discussion by the author.

Weakness:
Lack of introduction to highlight the importance of Home Energy Management System (HEMS).
Insufficient discussion on literature review on several optimization techniques used in this area, e.g. reason why MILP was chosen over Genetic Algorithm (GA) was not discussed.

> *** Contribution/s & Detailed comments: What are the major issues addressed in the paper? Do you consider them important? Comment on the degree of novelty, creativity and technical depth in the paper. Please provide detailed comments that will be helpful to the TPC for assessing the paper, as well as feedback to the authors.

Contribution:
a. The solution was implemented on an embedded system using Raspberry Pi 2 Model B as the main controller with four Arduino Mega 2560 as the local controllers of electrical appliances. Four load power profile scenario were optimized. The average execution time was measured.
b. The inter communication between the main controller and the local controllers was via wireless communication through ZigBee wireless network. Average transmission time was measured.
c. Based on the average execution time and transmission time, the proposed system was suggested to be used in real-time, i.e. within one second time constraint.

Comment:
Objective comparison with related work cannot be conducted because of different load power profile used. At the same time, hourly power consumption for a non-shiftable type like refrigerator is constant in [2] but was varied in this paper. Similarly, several constraint introduced in [2, 7] were not considered in solving the load scheduling optimization problem in this paper.

> *** Originality: New or Novel contribution
Weak Accept (6)

> *** Significance of Topic: Relating to knowledge contribution
Weak Accept (6)

> *** Presentation: Clarity and Organisation of Content
Weak Accept (6)

======= Review 3 =======

> *** Strengths/Weakness: What are the major reasons to accept/reject the paper? [Be brief.]

The paper was not well organized.

> *** Contribution/s & Detailed comments: What are the major issues addressed in the paper? Do you consider them important? Comment on the degree of novelty, creativity and technical depth in the paper. Please provide detailed comments that will be helpful to the TPC for assessing the paper, as well as feedback to the authors.

The MILP is implemented on the embedded system to solve the optimization problem in HEMS. The capability of the proposed system to run in the real-time is tested by experiments, and achieves the some results. The optimization technique implemented on the Raspberry module could optimize the load power scheduling properly. The wireless communication between the Raspberry and the local controller could transfer the data around the hundredth millisecond. This speed is suitable for our current application.

> *** Originality: New or Novel contribution
Weak Accept (6)

> *** Significance of Topic: Relating to knowledge contribution
Accept (8)

> *** Presentation: Clarity and Organisation of Content
Accept (8)

======= Track Chair 4 =======

> *** Comments: Please add your comment if applicable.

Weak Accept with major corections

======= Review 5 =======

> *** Strengths/Weakness: What are the major reasons to accept/reject the paper? [Be brief.]

1) The flows of the paper been written.

> *** Contribution/s & Detailed comments: What are the major issues addressed in the paper? Do you consider them important? Comment on the degree of novelty, creativity and technical depth in the paper. Please provide detailed comments that will be helpful to the TPC for assessing the paper, as well as feedback to the authors.

1) This paper is good for understanding the ability of raspberry pi for smart grid application

> *** Originality: New or Novel contribution
Accept (8)

> *** Significance of Topic: Relating to knowledge contribution
Accept (8)

> *** Presentation: Clarity and Organisation of Content
Accept (8)

Please take note that the DEADLINE for registration and camera ready is 30 SEPTEMBER 2016. Authors are to submit the FINAL MANUSCRIPT and fill in the e-COPYRIGHT FORM using EDAS system at this link: http://edas.info/showPaper.php?m=1570294224.

Guidelines for submission are as follows:

Step 1. Your final paper has to follow the Full Paper Template (http://www.ieee.org/conferences_events/conferences/publishing/templates.html). Final acceptance of paper is subject to similarity index of less than 30% (using EDAS system) The length of final paper should be no more than 6 pages in A4 size, including figures, tables and references. Please make sure that your final camera ready paper
– DOES NOT include page number, header and footer.
– INCLUDE all authors name and affiliation.

Step 2. Your final paper must be converted to PDF format using http://www.pdf-express.org using 39480X as Conference ID. Please upload the PDF file by clicking the Final Manuscript icon on EDAS system. Registration fees must be paid prior to uploading the final camera-ready version of the paper. Registration and payment can be made at the following link: https://edas.info/r22528

Step 3. To be published in the ICWiSe2016 Proceedings and to be eligible for publication in IEEE Xplore®, at least one author of an accepted paper is required to register for the conference. Registration fees must be paid prior to uploading the final camera-ready version of the paper. Please be advised that in-case more than one author would like to attend, EACH author is required to pay the conference fee. Please take note that the DEADLINE for camera ready is 30 SEPTEMBER 2016.

This notification email serves as our formal acceptance of your paper as well as an invitation to present your work at ICWiSe2016.

We would like to take this opportunity to thank you for choosing ICWiSe2016 to present your research results and looking forward to seeing you in Holiday Villa Hotel, Langkawi, Malaysia.

Regards
Chair

Aryuanto <aryuanto@gmail.com> Mon, Oct 3, 2016 at 2:21 PM
To: "Abraham Lomi. Ir., MSEE, Dr. Eng., Prof." <abraham@itn.ac.id>

Prof, ini yang conf tahun 2016.
[Quoted text hidden]

Abraham Lomi, Dr.Eng, Prof. <abraham@itn.ac.id> Mon, Oct 3, 2016 at 11:48 PM
To: Aryuanto <aryuanto@gmail.com>

Thanks Pak Ar.

Abraham Lomi, Dr. Eng
Professor in Electrical Power Engineering
(Power System, Power Electronics, Power Quality, Renewable Energy, and Smart Grid)
Department of Electrical Engineering
Institut Teknologi Nasional Malang

Jl. Raya Karanglo Km. 2, Malang 65143-INDONESIa
alternate e-mails:
abrahamlomi@ieee.org
abraham@lecturer.itn.ac.id
lomiabraham@yahoo.com
a_lomi@indo.net.id

Sent from my BlackBerry 10 (LEAP) on the Telkomsel network and true.

From: Aryuanto
Sent: Senin, 3 Oktober 2016 23.27
To: Abraham Lomi. Ir., MSEE, Dr. Eng., Prof.
Subject: Fwd: [ICWiSe 2016] Your paper #1570294224 ('Implementation of Optimization Technique on the

Embedded Systems and Wireless Sensor Networks for Home Energy Management in Smart Grid')

[Quoted text hidden]

Gmail Aryuanto Soetedjo <aryuanto@gmail.com>

[ICWiSe2016] Paper 1570294224 has been registered

1 message

aselamat@utm.my.edas.info <aselamat@utm.my.edas.info> Sun, Jun 26, 2016 at 9:50 PM
Reply-To: aselamat@utm.my
To: Aryuanto Soetedjo <aryuanto@gmail.com>
Cc: helmy.uthm@gmail.com

Dear Dr. Aryuanto Soetedjo:

Thank you for registering your paper 1570294224 ('Implementation of Optimization Technique on the Embedded Systems and Wireless Sensor Networks for Home Energy Management in Smart Grid') to 2016 IEEE Conference on Wireless Sensors (ICWiSe). You still have to upload your manuscript at https://edas.info/uploadPaper.php?m=1570294224.

- Via web form upload:

You can see all your submissions and their status at

https://edas.info/index.php?c=22528

using your EDAS user id aryuanto@gmail.com.

Once you upload your manuscript, you will receive another email confirmation.

.Regards,
Ali Selamat
Program Chair