

**INTERNATIONAL CONFERENCE ON COMPUTER SCIENCE AND
ENGINEERING TECHNOLOGY (ICCSET) 2018
FACULTY OF ENGINEERING UNIVERSITAS MURIA KUDUS**

1. Theme.

“Internet of Thing”

2. Background.

Internet of Things (IoT), a term that lately began to be crowded but still many do not understand the meaning of this term. Actually, until now there is no standard definition or definition of the Internet of Things, but in short the Internet of Things can be spelled out is where the objects around us can communicate between each other through a network such as the Internet.

The initial idea of the Internet of Things was first raised by Kevin Ashton in 1999 in one of his presentations. Now a lot of big companies start deepening the Internet of Things call it Intel, Microsoft, Oracle, and many others.

The Internet of things (IoT) is the network of physical devices, vehicles, home appliances, and other items embedded with electronics, software, sensors, actuators, and network connectivity which enable these objects to connect and exchange data. Each thing is uniquely identifiable through its embedded computing system but is able to inter-operate within the existing Internet infrastructure. Experts estimate that the IoT will consist of about 30 billion objects by 2020.

The IoT allows objects to be sensed or controlled remotely across existing network infrastructure, creating opportunities for more direct integration of the physical world into computer-based systems, and resulting in improved efficiency, accuracy and economic benefit in addition to reduced human intervention. When IoT is augmented with sensors and actuators, the technology becomes an instance of the more



general class of cyber-physical systems, which also encompasses technologies such as smart grids, virtual power plants, smart homes, intelligent transportation and smart cities.

Many predict that the influence of the Internet of Things is "the next big thing" in the world of information technology, this is because IoT offers a lot of potential that can be excavated. A simple example of the benefits and implementation of the Internet of Things for example is a refrigerator that can notify the owner via SMS or email about any food and beverages that have been exhausted and must be restocked again.

"Things", in the IoT sense, can refer to a wide variety of devices such as heart monitoring implants, biochip transponders on farm animals, cameras streaming live feeds of wild animals in coastal waters, automobiles with built-in sensors, DNA analysis devices for environmental/food/pathogen monitoring, or field operation devices that assist firefighters in search and rescue operations. Legal scholars suggest regarding "things" as an "inextricable mixture of hardware, software, data and service".

As of 2016, the vision of the Internet of things has evolved due to a convergence of multiple technologies, including ubiquitous wireless communication, real-time analytics, machine learning, commodity sensors, and embedded systems. This means that the traditional fields of embedded systems, wireless sensor networks, control systems, automation (including home and building automation), and others all contribute to enabling the Internet of things. The division of the Internet of Things presented by Beecham Research's with a very broad sector that is divided into 9 sections: construction and manufacturing, energy management, home automation, health and environmental, industrial, transportation, trading, security, technology and networking.

The Workings of the Internet of Things is to utilize a programming argument in which each of its argument commands generates an interaction between the machines that are connected automatically without human intervention and at any distance. The Internet is the link



between the two machine interactions, while humans only serve as regulator and supervisor of the workings of the tool directly.

The biggest challenge in setting up the Internet of Things is to set up its own communications network, which is very complex, and requires a tight security system. In addition, the expensive cost is often the cause of failure that led to failure of production.

Conversations about the IoT are (and have been for several years) taking place all over the world as we seek to understand how this will impact our lives. We are also trying to understand what the many opportunities and challenges are going to be as more and more devices start to join the IoT. For now the best thing that we can do is educate ourselves about what the IoT is and the potential impacts that can be seen on how we work and live.

Given the enormous opportunity of Internet of things from society, and the positive impacts of economic development, it is necessary to make special thoughts for the strategy of developing the Internet of this thing, with these problems and opportunities, the Faculty of Engineering UMK organizes an international seminar with the theme "Internet of things". This seminar activity is a collaboration of five existing courses in the Faculty of Engineering UMK, namely Information Systems Program, Informatics Engineering Program, Electrical Engineering Program, Mechanical Engineering Program, and Industrial Engineering Program. This international seminar is named INTERNATIONAL CONFERENCE ON COMPUTER SCIENCE AND ENGINEERING TECHNOLOGY (ICCSET) 2018 which is the first International Seminar.

With the conducting of this international seminar, is expected to have a positive impact for the Faculty of Engineering UMK in cooperation with lecturers and practitioners of IT and non IT from universities in Indonesia as well as abroad and related agencies who took part in exposing the article. In addition, it is expected that the policy makers in the government, as well as the community can play an active role in this seminar.



3. Purpose and Objectives.

The purpose and objectives of this international seminar are:

- 1) As a means of academics, policy makers, IT / non-IT practitioners, researchers and Internet technology users to discuss, convey new ideas, concepts, experiences and research results in the field of Internet technology focused on Economic Development Strategies Society through Internet of Thing.
- 2) Providing the discourse of various internet technologies in this case is the internet of thing as a strategy of developing creative industries and SMEs to solution the nation's problems related to the opportunities, challenges and problems that will be faced at this time and time to come.
- 3) Building cooperation between domestic and foreign universities, related institutions, business actors and the community.

4. Seminar Participants.

Participants who are expected to attend the International Seminar of Call For Paper Faculty of Engineering are academics of both lecturers and students, practitioners, industry, and the general public throughout Indonesia and abroad.

5. Implementation.

The activities of ICCSET 2018 are international seminars. The international seminar is divided into two sessions: Panel Seminar and Parallel Seminar.

1) Panel Seminar

This activity is a short seminar, which is a means for information and discussion on current issues related to technology. Topics to be raised in this seminar themed "Internet of Thing".

In this seminar, will be presented speakers national and international level who have competence and influence on the use of digital technology in the creative and innovative industry development strategy.



All participants are required to attend this panel seminar. Invited key speakers are:

- a. Prof. Chandratilak De Silva Liyanage (Universiti Brunei Darussalam)
- b. Assoc. Prof. Dr. Muzammil Bin Jusoh (Universiti Malaysia Perlis)
- a. Dr. Dasapta Erwin Irawan, ST, MT (Institut Teknologi Bandung)

2). Parallel Seminar

This activity begins with acceptance of papers from participants with details of the activity schedule as below:

No.	Activities	Schedule
1	Seminar & Call for Paper announcement	2 January 2018
2	Deadline for full paper submission batch 1	15 Jan – 19 June 2018
3	Announcement of papers received batch 1	10 July 2018
4	Camera Ready Submission batch 1	20 July 2018
5	Deadline for full paper submission batch 2	1 – 31 July 2018
6	Announcement of papers received batch 2	20 August 2018
8	Camera Ready Submission batch 2	30 August 2018
9	Seminar & Presentation	25 October 2018

The reviewers of the papers included in the ICCSET 2018 are:

- 1) I Putu Susila, Ph.D (Badan Tenaga Nuklir Nasional, Indonesia)
- 2) Romi Satria Wahono, M.Eng, Ph.D (Universitas Dian Nuswantoro, Indonesia)
- 3) Ir Herry Purnama, MT, Ph.D (Universitas Muhammadiyah Surakarta, Indonesia)
- 4) Dr. Lukmandono, ST.,MT (Institut Teknologi Adhi Tama Surabaya, Indonesia)
- 5) Dr. Agfianto Eko Putra, M.Sc (Universitas Gadjah Mada, Indonesia)



- 6) Fathul Wahid, ST.,M.Sc.,Ph.D (Universitas Islam Indonesia, Indonesia)
- 7) Etika Kartika Darma, S.Kom, M.Kom (Universitas Dian Nuswantoro, Indonesia)

This event contains presentations on the latest research and experience of science development and technology application by participant speakers. This activity is a forum for information exchange and discussion between researchers both from universities and research institutions. This activity is also a means for researchers to deliver the results of his writing in the field of technology. The paper presented by the researcher will be published in a Scopus-indexed IOP proceedings.

Call for paper fields to be included in ICCSET 2018 are:

- 1) Immersive experiences
- 2) Software engineering
- 3) Artificial intelligents
- 4) Information technology
- 5) Design and manufacturing
- 6) Materials engineering
- 7) Energy
- 8) Control systems and automations
- 9) Industrial engineering
- 10) Electronics and power electronics

6. Schedule

The National Seminar will be held on:

Date : October 25, 2018

Time : 08.00 - 16.00 WIB

Venue : Hotel Gripta Kudus



With the arrangement of events as follows:

TIME SCHEDULES
INTERNATIONAL CONFERENCE ON COMPUTER SCIENCE AND
ENGINEERING TECHNOLOGY (ICCSET) 2018
FACULTY OF ENGINEERING UNIVERSITAS MURIA KUDUS
THURSDAY, 25 OCTOBER 2018

Time	Section	Activities	Speaker
08.00-08.30	Registration		
08.30-09.00	Opening	Opening Speech	Rector
09.00-09.40	Panel Seminar	Topic 1	KeynoteSpeaker 1
09.40-10.20		Topic 2	KeynoteSpeaker 2
10.20-11.00		Topic 3	KeynoteSpeaker 3
11.00-11.45	Discussion		KeynoteSpeaker 1,2,3
11.45-12.15	Breaks		
12.15 -15.00	Parallel Seminar		Presenters and moderator
15.00-15.30	Breaks		
15.30- 16.45	Parallel Seminar		Presenters and moderator
16.45-17.00	Closing		Committee

7. Website

Making the website used as a medium of online socialization in addition to socializing offline through letters of invitations, posters, leaflets and billboards. The website is also intended to facilitate the sharing of information with ICCSET 2018 participants. The ICCSET 2018 website can be accessed through the <http://iccset.umk.ac.id>.

