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# Welcome Message from General Chair

Dear respected scholars and professionals,

On behalf of the conference committees, it is my great pleasure to welcome all of you to ICFICE2020, the 13th International Conference on Future Information & Communication Engineering that is being held by online conference on 19th February, 2021. We cordially invite international scholars, professionals and practitioners from universities and research institutions to share and exchange their experiences, new ideas, and recent progresses of researches in future trends of information science and communication engineering.

Now human beings are on the verge of the arrival of a new society in which everything is changing rapidly and never experienced before. We call it the 4th industrial revolution. The key issues are intelligent information and communication technologies (ICT) such as artificial intelligence, IoT, big data, 5G network, autonomous driving, block chain, edge computing, and so on. This conference has presented various scholarly achievements that are fused with intelligent information and communication technologies. We heartedly want our researchers to utilize this precious conference as an opportunity to develop their ideas and to facilitate human life more convenient than ever before.

As the general chair of ICFICE2020, I am very happy to announce that selected remarkable papers presented here will be extended and to be published in several associated SCOPUS indexed journals to share achievements with researchers all over the world. I would like to appreciate to the members of program committee and organization committee, keynote speaker, reviewers and authors who have contributed to the success of this conference. I wish you have meaningful and pleasant time during this conference.

Dr. Young Woon Woo  
General Chair of ICFICE2020

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# Conference Schedule Overview

## ● Opening Ceremony / Keynote Speech

- Time : 10:00 ~ 10:45 (19<sup>th</sup> February, 2021)
- Place : Online Conference
- Keynote Speech  
Title : Aspects of Security in Smart or IoT Devices  
Speaker : Dr. Mokhamad Hendayun  
(Langlangbuana University, Indonesia)

## ● Technical Session

- Time : 10:45 ~ 12:00 (19<sup>th</sup> February, 2021)  
13:00 ~ 14:15

<b>ICFICE 2020</b> <b>19<sup>th</sup> February, 2021, Online Conference</b>		
<b>19<sup>th</sup> February, 2021</b>		
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11:00~ 11:15	<b>DA-2</b>	<b>IS-2</b>
11:15~ 11:30	<b>IB-1</b>	<b>IS-3</b>
11:30~ 11:45	<b>IB-2</b>	<b>IS-4</b>
11:45~ 12:00	<b>IB-3</b>	<b>NS-1</b>
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13:15~ 13:30	<b>IT-2</b>	
13:30~ 13:45	<b>IT-3</b>	
13:45~ 14:00	<b>MD-1</b>	
14:00~ 14:15	<b>MD-2</b>	

- ※ DA : Database and Internet Application  
 IB : IoT and Big Data  
 IS : Intelligent Information System  
 NS : Networking and Services  
 IT : IT Convergence Technology  
 MD : Multimedia and Digital Convergence

<b>ICFICE 2020</b> <b>19<sup>th</sup> February, 2021, Online Conference</b>		
<b>19<sup>th</sup> February, 2021</b>		
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- ※ BI : Biomedical Imaging and Engineering  
 CA : Communication System and Application  
 IS : Intelligent Information System  
 NS : Networking and Services  
 IT : IT Convergence Technology

<b>ICFICE 2020</b> <b>19<sup>th</sup> February, 2021, Online Conference</b>		
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※ IB : IoT and Big Data

MD : Multimedia and Digital Convergence

SC : Semiconductor and Communication Services

UN : Ubiquitous Sensor Network

**19th February, 2021**

**Session DA : Database and Internet Application**

**Session IB : IoT and Big Data**

**Session Chair** : Prof. Choong Ho Lee  
(Hanbat National Univ.)

**10:45~12:00**

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## **Session IT : IT Convergence Technology**

### **Session MD : Multimedia and Digital Convergence**

**Session Chair : Prof. Ho Young Hwang**  
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