



## TC ANNUAL REPORTING FORM

IMS Technical Committee

TC-40 Secure and Dependable Measurement

Reporting period

Starting date (dd/mm/yy)

Ending date (dd/mm/yy)

Date of submission (dd/mm/yy)

01/09/2019

31/08/2020

11/10/2020

Website

Last update (mm/yy)

<http://iee-ims.org/content/tc-40-secure-and-dependable-measurement>

TC Chair or co-Chairs

First Name	Second Name	Family Name	Affiliation /Address	Membership number	Phone	e-mail address	Date of election
Shiyan		Hu	University of Southampton/University Road, SO17 1BJ, Southampton, UK	90441662	+442380595854	S.Hu@soton.ac.uk	

Secretary (check the right box)

Present  Not Present

First Name	Second Name	Family Name	Affiliation /Address	Membership number	Phone	e-mail address	Date of election
Bei		Yu	Chinese University of Hong Kong/Rm 907, Ho Sin Hang Engineering Building, The Chinese University of Hong Kong, Hong Kong, P.R. China	92084736	+85239438435	byu@cse.cuhk.edu.hk	

TC Membership list<sup>(\*)</sup>

\* Please add as many rows as needed

First Name	Second Name	Family Name	Affiliation /Address	Membership number	Phone	e-mail address	TC assignments (joining year)
Shiyan		Hu	University of Southampton/University Road, SO17 1BJ, Southampton, UK	90441662	+442380595854	S.Hu@soton.ac.uk	
Bei		Yu	Chinese University of Hong Kong/Rm 907, Ho Sin Hang Engineering Building, The Chinese University of Hong Kong, Hong Kong, P.R. China	92084736	+85239438435	byu@cse.cuhk.edu.hk	
Junlong		Zhou	Nanjing University of Science and Technology/2075-1 CS Building, 200 Xiaolingwei Road, Nanjing, China	94445757	+8613739190598	jlzhou@njust.edu.cn	
Kun		Cao	Jinan University/ No.601, West Huangpu Avenue, Guangzhou, 510632 China	97087179	+8618620713527	kuncao@jnu.edu.cn	
Keke		Huang	Central South University, 932 South Lushan Road, Changsha, Hunan	94348162	+8615173188599	huangkeke@csu.edu.cn	
Chengbing		Liang	Hunan University/Lushan Road, Yuelu District, Changsha, Hunan, P.R. China	96630657	+8615008501003	chengbinliang@126.com	
Lei		Wang	National Institute of Metrology, P.R. China	93729539		wl@nim.ac.cn	
Xin		Li	Duke University/2529 CIEMAS Building, Box 90291, Durham, NC 27708	41417620		xinli.ece@duke.edu	

**TC mission – field of expertise (max. 1000 char. Including spaces)**

\* Please add as many rows as needed

2

The goals of this Technical Committee are to:

- Develop, promote and support research and education in the area of secure and dependable measurement;
- Develop and evaluate security oriented testing, measurement and instrumentation methodologies;
- Promote big data analytics and learning techniques for security oriented measurement;
- Develop security and big data related measurement standards and promote them to user, industrial, and government communities;
- Maintain liaison with other societies, technical committees, and international organizations working in the related areas.

### TC meetings in the reporting period<sup>(\*)</sup>

Date (dd/mm/yy)	Online / Face2Face	Attendance (number)	TC Members	Information sent within 4 months to (Yes/No)		
				Chair of TSAC	IM Magazine	Other (specify)
16/09/20	Online	6	Shiyan Hu, Bei Yu, Junlong Zhou, Lei Wang, Kun Cao, Keke Huang	No	No	

### Minutes of the yearly meeting (separate file)<sup>1</sup>:

### Participation in Society sponsored Events (Conferences, Symposia, Workshops)<sup>(\*)</sup>

Name of the Event	Starting date (event)	Ending date (event)	Date Participation	Type of participation (Yes/No)			
				Sponsorship	Session	Tutorial	Other (specify) <sup>2</sup>

<sup>1</sup> Yes/No, date of the yearly meeting;

\* Please add as many rows as needed



(dd/mm/yy) (dd/mm/yy) (dd/mm/yy)

CIVEMSA 2020

*paper solicitation and review*

### Involvement in standard development<sup>(\*)</sup>

Standard	Working Group	Revision	Activity in the reporting period, including dates	Notes, attendance
----------	---------------	----------	---	-------------------

### Participation in the development of Society Educational Programs<sup>(\*)</sup>

Program name	Involvement of chapters and sections	Activity in the reporting period, including dates	Notes, attendance
--------------	--------------------------------------	---	-------------------

### Other Activities (tutorials, teaching, career, cooperation, publications, joint activity with chapters or sections)<sup>(\*)</sup>

Type of activity	Starting date (dd/mm/yy)	Ending date (dd/mm/yy)	Activity in the reporting period	Notes, attendance
------------------	--------------------------	------------------------	----------------------------------	-------------------

<sup>2</sup> For example, Involvement in reviewing papers (and indicate approximate number of paper reviews for the listed event)

\* Please add as many rows as needed



Journal special issue

Organized a special issue in IEEE Internet-of-Things Journal, Special Issue on Security, Privacy, and Trustworthiness in Intelligent Cyber-Physical Systems and Internet-of-Things, Submission Deadline: January 15, 2021

The TC Chair Shiyun Hu is the lead guest editor for this special issue

[https://iee-iotj.org/wp-content/uploads/2020/09/IOTJ\\_SPT\\_CFP.pdf](https://iee-iotj.org/wp-content/uploads/2020/09/IOTJ_SPT_CFP.pdf)

### Recommended candidates<sup>(\*)</sup>

Type (ADCOM, Fellow, Award –specify-)	First Name	Second Name	Family Name	Affiliation /Address	Motivation
---------------------------------------	------------	-------------	-------------	----------------------	------------

### TC operating Plan: near-term plans for the upcoming year, including scheduled meetings, activities, and so on (max. 1000 char. Including spaces)

Plan to co-organize conference special sessions and panels at IEEE CPSCoM 2021 and IEEE ICPS 2021, in cooperation with IEEE Systems Council Technical Committee on Cyber-Physical Systems ([www.ieee-cps.org](http://www.ieee-cps.org)), with the focus on secure and dependable sensing and measurement

Plan to co-organize special issues for IEEE Transactions in cooperation with IEEE Systems Council Technical Committee on Cyber-Physical Systems, with the focus on secure and dependable sensing and measurement

Plan to work with IEEE ILN to create a secure and dependable sensing and IoT related module for promoting educational activities

\* Please add as many rows as needed

**TC operating plan: long term vision from 2-5 years out, based on IMS Strategic Plan, including areas of strength , areas for improvement, how is the subject area going to change, planned actions for lifting achievement succession plans etc. (max. 1000 char. Including spaces)**

---

We plan to promote the technical and educational activities in the area of secure and dependable measurement not covered by other TCs in I&M. Plan to promote the memberships and activities related to secure and dependable measurement and involve more senior and junior researchers and engineers. Senior researchers are well established and more experienced, who can promote the TC through organizing journal special issues and conference special sessions. Young researchers represent the future of the field, and thus encouraging and developing them is certainly critical. For this, we plan to establish the TC level best student research awards for graduate students and early-career research awards for junior faculty and junior industrial researchers to recognize their excellence in research and education, and promote the research and education in secure and dependable measurement in the international community.

---

**TC convergence, synergy, cooperation with other TC, from I&M or other societies (max. 1000 char. Including spaces)**

---

Plan to work closely with IEEE Systems Council Technical Committee on Cyber-Physical Systems ([www.ieee-cps.org](http://www.ieee-cps.org)) which focuses on the general design, optimization and modeling of cyber-physical systems, and this TC is chaired by Professor Shiyuan Hu. TC 40 focuses on the security issues related to sensing and measurement of cyber-physical systems, which could be a natural complement and help achieve a win-win. We also plan to collaborate with IEEE IES Technical Committee on Industrial Cyber-Physical Systems chaired by Professor Armando Walter Colombo.



Comments/Suggestions (max. 1000 char. Including spaces)

---

\* Please add as many rows as needed