PROGRAM BOOK



# IWBIS 2026

The $8^{th}$ International Workshop on Big Data and Information Security (IWBIS) provides an international forum that brings together those who are actively involved in the field of Big Data and Information Security.

Host

Financial Sponsor

Technical Sponsor

# TABLE OF CONTENTS

## Contents


**Program Schedule** . . . . . **2**
**Organizers & Committees** . . . . . **3**
**Student Volunteers** . . . . . **4**
**Speakers** . . . . . **5**
Keynote Speaker I: Prof. Dr. Subhas Mukhopadhyay, FIEE, FIETE . . . . . 5
Keynote Speaker II: Assoc. Prof. Ts. Dr. Mohammad Kamrul Hasan . . . . . 6
Keynote Speaker III: Prof. Dr. T. M. Indra Mahlia . . . . . 7
Keynote Speaker IV: Prof. Yong Xiao . . . . . 8
Invited Speaker: Grafika Jati, S.Kom., M.Kom., Ph.D. . . . . 9
**Registration** . . . . . **10**
Registration Fee of IWBIS 2026 . . . . . 10
Payment . . . . . 11
Registration Notes . . . . . 11
**Conference Platform** . . . . . **12**
**Technical Program** . . . . . **13**
Parallel Session 1: Cybersecurity & Cryptography . . . . . 13
Parallel Session 2: NLP & Analytics . . . . . 14
Parallel Session 3: Computer Vision, Data Structure & Governance . . . . . 15
**Guidelines for Presenters** . . . . . **16**
**Guidelines for Session Chairs** . . . . . **17**

# CONFERENCE INFORMATION

| | |
|---|---|
| Dates | October 16th (Friday) – October 18th (Sunday) 2026 |
| Organizer | **Faculty of Computer Science, Universitas Indonesia**, Indonesia |
| Venue | Auditorium Indro Suwandi |
| Official Language | English |
| Secretariat | Faculty of Computer Science, Universitas Indonesia<br>Kampus UI Depok<br>Depok, 16424<br>Indonesia<br>T: +62 21 786 3419 ext. 3225<br>F: +62 21 786 3415<br>E: iwbis@cs.ui.ac.id<br>W: `cs.ui.ac.id` |
| Conference Website | `iwbis.cs.ui.ac.id` |

Last compiled: 2026-10-18 06:32+07:00

# IWBIS 2026

International Workshop on Big Data and Information Security
16 - 18 October 2026 • Depok, Indonesia

## Program Schedule

### Day 1 – Friday, 16 Oct

**13:30 – 16.30**
IWBIS Participant Registration
Registration and participant check-in are available during the joint ICACSIS–IWBIS conference activities.

Registration Information
Please visit the registration desk and prepare your registration confirmation or identification.

### Day 2 – Saturday, 17 Oct

**07:00 – 16.10**
IWBIS Participant Registration
Registration and participant check-in remain available during the joint ICACSIS–IWBIS conference activities.

Registration Information
Participants who have not registered on Day 1 may complete registration before the main IWBIS program.

**17.10 – 21.30**
Gala Dinner
2nd Floor Corridor near Auditorium Indro Suwandi

### Registration Notes

**Registration Desk**
Ruang Sidang, $4^{th}$ Floor
Faculty of Computer Science, Universitas Indonesia

**Important**
Participants are encouraged to complete registration before the IWBIS main program on 18 October 2026.

### Day 3 – Sunday, 18 Oct

**08:00 – 08:45** Registration
Registration Desk Open
Ruang Sidang, 4th Floor

**08:45 – 09:00** Opening
Opening Ceremony
Auditorium Indro Suwandi

**09:00 – 09:45** Invited Speaker I:
Grafika Jati, Ph.D.
Moderator: Muhammad Febrian Rachmadi, Ph.D.
Ruang Sidang, 4th Floor

**09:45 – 10:00** Coffee Break
1st Floor Corridor, Zone 3

**10:00 – 11:45** Parallel Session
For more information, see page 13

**11:45 – 12:45** Lunch Break
1st Floor Corridor, Zone 3

**12:45 – 13:30** Keynote Speaker I:
Prof. Dr. Subhas Mukhopadhyay
Moderator: Prof. Wisnu Jatmiko
Auditorium Indro Suwandi

**13:30 – 14:15** Keynote Speaker II:
Assoc. Prof. Ts. Dr. Mohammad Kamrul Hasan
Moderator: Amril Syalim, Ph.D.
Auditorium Indro Suwandi

**14:15 – 15:00** Keynote Speaker III:
Prof. Dr. T. M. Indra Mahlia
Moderator: Dr. Yekti Wirani
Auditorium Indro Suwandi

**15:00 – 16:00** Coffee Break
1st Floor Corridor, Zone 3

**16:00 – 16:45** Keynote Speaker IV:
Prof. Yong Xiao
Moderator: Made Harta Dwijaksara, Ph.D.
Auditorium Indro Suwandi

**16:45 – 17:15** Closing Ceremony and Awards
Auditorium Indro Suwandi

# Organizers & Committees

### Honorary Chairs
Heri Hermansyah, Universitas Indonesia, ID
Wisnu Jatmiko, Universitas Indonesia, ID

### General Chair
Indra Budi, Universitas Indonesia, ID

### Program Chair
Vektor Dewanto, Universitas Indonesia, ID
Ibad Rahadian Saladdin, Universitas Indonesia, ID

### Publicity Chair
Jessica N. Arwidarasti, Universitas Indonesia, ID

### Proceeding Chair
Lintang Matahari Hasani, Universitas Indonesia, ID

### Treasurers
Edina Ayuningtyas, Universitas Indonesia, ID
Nurul Fazriah, Universitas Indonesia, ID

### Local Organizing Chair
Shabrina S. Kurniawan, Universitas Indonesia, ID

### Program Committees
Achmad Nizar Hidayanto, Universitas Indonesia, ID
Alfan Farizki Wicaksono, Universitas Indonesia, ID
Amril Syalim, Universitas Indonesia, ID
Ananto Tri Sasongko, Universitas Pelita Bangsa, ID
Aniruddha Singh Gautam, Microsoft, US
Anita Hidayati, Politeknik Negeri Jakarta, ID
Arfive Gandhi, Universitas Telkom, ID
Ari Saptawijaya, Universitas Indonesia, ID
Ari Wibisono, Universitas Indonesia, ID
Ario Yudo Husodo, Universitas Mataram, ID
Ati Suci Dian Martha, Telkom University, ID
Avinanta Tarigan, Universitas Gunadarma, ID
Berliyanto, Institut Teknologi Budi Utomo, ID
Betty Purwandari, Universitas Indonesia, ID
Bety H. Susanti, Politeknik Siber dan Sandi Negara, ID
Bayu Anggorojati, Monash University, ID
Dina Chahyati, Universitas Indonesia, ID
Erdefi Rakun, Universitas Indonesia, ID
Esa Prakarsa, BRIN, ID
Evi Yulianti, Universitas Indonesia, ID
Fatimah Azzahro, Universitas Indonesia, ID
Fariz Darari, Universitas Indonesia, ID
Ika Alfina, Universitas Indonesia, ID
Imairi Eitiveni, Universitas Indonesia, ID
Kurniawati Azizah, Universitas Indonesia, ID
Laksmita Rahadianti, Universitas Indonesia, ID
Lim Yohanes Stefanus, Universitas Indonesia, ID
Muhammad Anwar Ma'sum, Universitas Indonesia, ID
Muhammad F. Rachmadi, Universitas Indonesia, ID
Muhammad Okky Ibrohim, Universitas Indonesia, ID
Nabila Clydea Harahap, Universitas Indonesia, ID
Rahmad Mahendra, Universitas Indonesia, ID
Santosh Appachu Devanira Poovaiah, NVIDIA, US
Sarath Kumar Kallayil Sreedharan, AWS, US
Setiadi Yazid, Universitas Indonesia, ID
Toto Haryanto, Institut Pertanian Bogor, ID
Vatsal Gupta, Apple Inc., US
Wahyu Catur Wibowo, Universitas Indonesia, ID
Widijanto Satyo Nugroho, Universitas Indonesia, ID

# Student Volunteers

### Volunteer Coordinator *All Area*
Riri Safitri (S3 - 2025)
Suryatiningsih (S3 - 2025)
Yogiek Indra Kurniawan (S3 - 2024)
Muhammad Naufal Al Ghifari (S2 - 2025)

### Registration & Welcome Desk
*Registration Area*
Lead: Ayreine Nisya' D (S2 - 2025)

- Ahmad Rizki Daffaa (S1 - 2025)
- Fadil Surya Pramana (S1 - 2026)
- Vanessa Josephin Gwi (S1 - 2026)

### Information Desk & Participant Service
*Lobby / Help Desk*
Lead: Syaikha Amirah Zikrina (S2 - 2025)

- Hilda Nida Alistiqlal (S2 - 2025)
- Farel Boston Corinthians Nadeak (S1 - 2025)

### VIP & Speaker Liaison
*VIP / Speaker Area*
Lead: Suryatiningsih (S3 - 2025)

- Muhammad Kaddafi Suyatno (S2 - 2025)
- Muhammad Naufal Al Ghifari (S2 - 2025)
- Hilda Nida Alistiqlal (S2 - 2025)
- Vanessa Josephin Gwi (S1 - 2026)

### Session Chair
*Parallel Session Room*
Lead: Nashuha Insani (S2 - 2025)

- Agsanshina Raka Syakti (S2 - 2024)
- Tasya Mulia Salsabila (S2 - 2025)
- Nabila Hermawati (S2 - 2026)

### Parallel Session Room Assistant
*Parallel Session Room*
Lead: Muhammad Kaddafi Suyatno (S2 - 2025)

- Mikhael Tobias Ezra Simanjuntak (S1 - 2026)
- Rindivia Derilla Zihan (S1 - 2026)

### Technical Support
*All Session Room*
Lead: Vincentius Filbert Amadeo (S1 - 2024)

- Fahrezy Khairu Ghassani (S1 - 2026)
- Almas Mustaqim

### Time Keeper
*Session Room*
Lead: Harman Hakim (S1 - 2023)

- Daffa Mohamad Fathoni (S1 - 2022)

### Auditorium Main Hall
*Main Auditorium*
Lead: Riri Safitri (S3 - 2025)

- Yogiek Indra Kurniawan (S3 - 2024)
- Muhammad Naufal Al Ghifari (S2 - 2025)

### Documentation & Media
*All Venue*
Lead: Nadya Aulia Putri (S2 - 2024)

- Alif Shidqi Putra Amir (S1 - 2025)
- Glenn Josia Devano (S1 - 2025)
- Batrisya Dayana (S1 - 2026)

### Hospitality & Catering
*Lunch / Coffee Break / Gala Dinner*
Lead: Hilda Nida Alistiqlal (S2 - 2025)

- Vanessa Josephin Gwi (S1 - 2026)
- Farel Boston Corinthians Nadeak (S1 - 2025)
- Muhammad Kaddafi Suyatno (S2 - 2025)
- Rindivia Derilla Zihan (S1 - 2026)

# Speakers

## KEYNOTE SPEAKER I



**PROF. DR. SUBHAS MUKHOPADHYAY, FIEE, FIETE**

Professor of Mechanical/Electronics Engineering

**School of Engineering, Macquarie University**
**New South Wales, Australia**

Prof. Subhas holds a B.E.E. (gold medallist), M.E.E., Ph.D. (India) and Doctor of Engineering (Japan). He has over 35+ years of teaching, industrial and research experience. Currently he is working as a Professor of Mechanical/Electronics Engineering, Macquarie University, Australia and is the Discipline Leader of the Mechatronics Engineering Degree Programme. His fields of interest include Smart Sensors and sensing technology, instrumentation techniques, wireless sensors and network (WSN), Internet of Things (IoT), robotics and Mechatronics, and Drones etc. He has supervised over 60 postgraduate students and over 200 Honours students. He has examined over 80 postgraduate theses.

He has been co-inventor of 14 patents and published over 500 papers in different international journals and conference proceedings, written ten books and sixty two book chapters and edited twenty conference proceedings. He has also edited fifty books and forty five journal special issues. He has organized over 25 international conferences as either General Chairs/co-chairs or Technical Programme Chair. He has delivered 470 presentations including keynote, invited, tutorial and special lectures. As per Google Scholar, his total citation is 30965 and h-index is 89.

He is a Fellow of IEEE (USA), a Fellow of IET (UK), a Fellow of IETE (India). He was a Topical Editor of IEEE Sensors Journal from 2013 to 2025 and an Associate Editor for IEEE Transactions on Instrumentation and Measurements from 2007 to 2025. He is an associate editor of IEEE Transactions on Reviews in Biomedical Engineering (RBME). He is the EiC of the International Journal on Smart Sensing and Intelligent Systems. He was a Distinguished Lecturer of the IEEE Sensors Council from 2017 to 2022. He chairs the IEEE Instrumentation and Measurement Society NSW chapter.

For more details, please see:

- `https://scholar.google.com.au/citations?user=8p-BvWIAAAAJ&hl=en`
- `https://orcid.org/0000-0002-8600-5907`
- `http://web.science.mq.edu.au/directory/listing/person.htm?id=smukhopa`

## KEYNOTE SPEAKER II



**ASSOC. PROF. MOHAMMAD KAMRUL HASAN**

Associate Professor and Head of the Network and Communication Technology Research Lab at the Center for Cybersecurity

**Universiti Kebangsaan Malaysia**

Associate Professor Ts. Dr. Mohammad Kamrul Hasan is an Associate Professor at the Center for Cyber Security, Faculty of Information Science and Technology, Universiti Kebangsaan Malaysia (UKM). He also leads the Network and Communication Technology Research Lab, where he heads interdisciplinary research addressing cybersecurity challenges in critical infrastructure, industrial systems, healthcare, energy networks, and connected digital environments.

He received his Ph.D. in Electrical and Communication Engineering from the International Islamic University Malaysia in 2016, following an M.Sc. in Communication Engineering from the same university in 2012. Before entering doctoral study, he accumulated approximately ten years of industry experience in computer networks and security, communication systems and networks, and wide-area network design and planning, including work related to PLC, PMU, SCADA, and Wide Area Measurement Systems.

His research interests include information-centric networking, computer networks, data communication and security, mobile-network privacy protection, cyber-physical systems, Industrial Internet of Things (IIoT), transparent artificial intelligence, smart-grid communications, electric-vehicle networks, federated learning, and 5G/6G network resilience. His current research particularly examines how cybersecurity and AI can strengthen the trustworthiness, privacy, and resilience of interconnected systems.

Dr. Hasan is a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE), a member of the Institution of Engineering and Technology (IET), a member of the Internet Society, and a certified Professional Technologist in Malaysia. He has contributed to the academic community through research supervision, editorial and peer-review service, research collaboration, and industry consultation. His scholarly record includes more than 250 indexed journal and conference publications, as well as supervision of doctoral and master's students and postdoctoral researchers.

His research contributions have been recognised through awards including a gold medal for research work, a Young Scientist Award, and a Fulbright scholarship supported by the Ministry of Higher Education Malaysia. He has also been recognised in the Stanford University and Elsevier Top 2% Scientists listings for multiple consecutive years. Through his research leadership and international collaborations, Dr. Hasan continues to advance secure, intelligent, and resilient communication technologies for next-generation digital infrastructure.

For further information, please visit:

- `https://kamrul-ukm.github.io/`
- `https://scholar.google.com/citations?user=IAybniwAAAAJ&hl=en`

## KEYNOTE SPEAKER III



**PROF. DR. T. M. INDRA MAHLIA**

Professor of Civil and Environmental Engineering

**University of Technology Sydney**

**Australia**

Professor T. M. Indra Mahlia is a Distinguished Professor in the School of Civil and Environmental Engineering at the University of Technology Sydney (UTS), Australia. He is an Australian engineer, a Highly Cited Researcher in Engineering, and a core member of UTS's Centre for Water and Wastewater Technology. Since joining UTS as a Distinguished Professor in 2018, he has contributed to research and academic leadership in sustainable energy, environmental engineering, and resource-efficient technology systems.

Professor Mahlia's research spans energy systems and fuels, techno-economic analysis, life-cycle assessment, life-cycle cost, cost-benefit analysis, the water–energy nexus, and circular economy. His work connects engineering analysis with environmental and economic decision-making, supporting the development and evaluation of sustainable energy technologies, clean-fuel pathways, and resilient energy–water systems.

He obtained his Ph.D. from the Department of Mechanical Engineering at the University of Malaya, Kuala Lumpur. He was appointed Professor in the same department in 2009 before joining UTS in 2018. He also holds an Adjunct Professor appointment at Universitas Indonesia, reflecting his continued engagement with academic and research communities in Indonesia and the wider Asia–Pacific region.

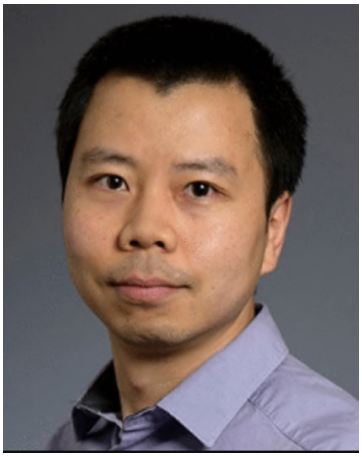
Professor Mahlia has led and contributed to research projects supported by government and industry organisations, with total project funding exceeding AUD 6 million. His research contributions have been recognised internationally through repeated inclusion in Clarivate's Highly Cited Researchers list in Engineering from 2017 to 2022. He was also recognised for leadership in Sustainable Energy in *The Australian*'s special reports in 2019 and 2025.

In addition to his research output, Professor Mahlia is committed to the development of emerging researchers. Through postgraduate supervision, mentoring, research collaboration, and scholarly leadership, he has supported the growth of researchers working across sustainable energy, environmental engineering, and related interdisciplinary fields. His work continues to contribute to the transition toward cleaner, more efficient, and more sustainable energy systems.

For further information, please visit:

- `https://profiles.uts.edu.au/TMIndra.Mahlia`
- `https://scholar.google.com/citations?user=jruLhLoAAAAJ&hl=en`

## KEYNOTE SPEAKER IV



**PROF. YONG XIAO**

School of Electronic Information and Communications

**Huazong University of Science and Technology**
**Wuhan, China**

Professor Yong Xiao is a Huazhong-Scholar Distinguished Professor in the School of Electronic Information and Communications at Huazhong University of Science and Technology (HUST), Wuhan, China. He is also the Associate Group Leader of the Network Intelligence Group of the IMT-2030 (6G) Promotion Group and Vice Director of the 5G Verticals Innovation Laboratory at HUST. His research and professional activities contribute to the development of intelligent, secure, and application-oriented communication technologies for next-generation digital infrastructure.

Professor Xiao received his Master's degree from the Hong Kong University of Science and Technology in 2006 and his Ph.D. degree from Nanyang Technological University, Singapore, in 2010. Before joining HUST, he served as a Research Assistant Professor in the Department of Electrical and Computer Engineering at the University of Arizona, United States. During this appointment, he was also the Center Manager of the Broadband Wireless Access and Applications Center, an NSF Industry/University Cooperative Research Center. He has additionally held postdoctoral research positions at Trinity College Dublin, the Massachusetts Institute of Technology, and the University of Houston.

His research interests include agentic AI networking, semantic communications, semantic-aware networking, network artificial intelligence, edge intelligence, machine learning, distributed optimization, game theory, cloud, fog, and mobile-edge computing, green communication systems, wireless communication networks, and the Internet of Things. He has been actively involved in advancing semantic-aware networking, including international standardization work through ITU-T, where he leads an early international standardization effort in this area.

Professor Xiao has made sustained contributions to research on intelligent wireless and communication systems, with applications spanning 5G and 6G networks, Internet-of-Things systems, mobile-edge computing, smart-grid communications, energy-harvesting networks, and the Tactile Internet. His work combines theoretical methods, including optimization and economic modelling, with system-level approaches for the design of efficient, resilient, and intelligent networked systems.

He is a Senior Member of the IEEE and has served the research community through editorial and technical-programme activities for leading journals and international conferences. His professional service includes editorial-board work for *IEEE Transactions on Mobile Computing* and participation in technical committees for numerous communications, networking, and computing venues.

For further information, please visit:

- `https://sites.google.com/site/xyong2007/`

## INVITED SPEAKER



**GRAFIKA JATI, S.KOM., M.KOM., PH.D**

Alma Mater Studiorum

**Università di Bologna**

**Italy**

Grafika Jati is a researcher in intelligent mobility, computer vision, robotics, machine learning, and secure connected autonomous vehicles. He is pursuing doctoral research in Automotive Engineering for Intelligent Mobility at the University of Bologna, Italy, in collaboration with FEV Italy. His work is associated with the Green Mobility Research Lab, a joint University of Bologna–FEV Italy initiative focused on the development of intelligent-mobility technologies.

He received his Bachelor's degree in Computer Science from Universitas Indonesia in 2014 and his Master's degree in Computer Science from Universitas Indonesia in 2016. His academic background in computer science, together with his research activities in intelligent systems and robotics, has supported his multidisciplinary work at the intersection of artificial intelligence, autonomous systems, and automotive engineering.

His doctoral research focuses on the use of machine learning to support Advanced Driver Assistance Systems (ADAS) and autonomous driving. His research interests include computer vision, robotics, machine learning, sensor-based perception, intelligent transportation systems, edge computing, and the security and robustness of connected autonomous vehicles. In particular, his work addresses challenges in developing dependable vehicle intelligence for complex and data-intensive mobility environments.

Grafika has contributed to research in artificial intelligence and robotics through publications and collaborative activities involving autonomous systems, intelligent unmanned aerial vehicles, perception technologies, and data-driven decision-making. He is affiliated with the Intelligent Robots and Systems Laboratory at the Faculty of Computer Science, Universitas Indonesia, whose research encompasses intelligent robotics, multimodal sensing, data representation, analytics, dynamic robotic systems, and embedded AI.

His current work reflects the growing convergence of automotive engineering, edge intelligence, cyber security, and artificial intelligence. By combining machine-learning methods with connected-vehicle and mobility-system perspectives, he contributes to research toward safer, more adaptive, and more secure intelligent transportation technologies.

For further information, please visit:

- `https://orcid.org/0000-0003-4689-9843`
- `https://scholar.google.com/citations?user=snImGf4AAAAJ&hl=en`

# Registration

## 5.1 Registration Fee of IWBIS 2026

**International Participants (USD)**

| Category | | Presenter | | Student Presenter | | Non-presenter |
|---|---|---|---|---|---|---|
| **Type** | **Attendance** | **IEEE** | **Non-IEEE** | **IEEE** | **Non-IEEE** | |
| Early Bird | Virtual | 250 | 300 | 225 | 250 | 50 |
| Early Bird | On-site | 350 | 400 | 325 | 350 | 150 |
| Regular | Virtual | 300 | 350 | 250 | 300 | 100 |
| Regular | On-site | 400 | 450 | 350 | 400 | 200 |

**Domestic Participants (IDR)**

| Category | | Presenter | | Student Presenter | | Non-presenter |
|---|---|---|---|---|---|---|
| **Type** | **Attendance** | **IEEE** | **Non-IEEE** | **IEEE** | **Non-IEEE** | |
| Early Bird | Virtual | Rp 2,500,000 | Rp 3,000,000 | Rp 2,250,000 | Rp 2,500,000 | Rp 500,000 |
| Early Bird | On-site | Rp 3,500,000 | Rp 4,000,000 | Rp 3,250,000 | Rp 3,500,000 | Rp 1,500,000 |
| Regular | Virtual | Rp 2,750,000 | Rp 3,500,000 | Rp 2,500,000 | Rp 3,000,000 | Rp 750,000 |
| Regular | On-site | Rp 3,750,000 | Rp 4,500,000 | Rp 3,500,000 | Rp 4,000,000 | Rp 1,750,000 |

*IEEE member and non-IEEE member fees appear in that order. Registration fees are per paper. Conference registration includes electronic proceedings, an e-certificate, and access to the IWBIS and ICACSIS 2026 parallel sessions.*

## 5.2 Payment

| | |
|---|---|
| BNI | Bank Name : BNI<br>Account Name (payee): UNIVERSITAS-INDONESIA<br>Branch name: UI Depok<br>Account Number : 127 3000 444<br>Swift Code (BIC) :<br>BNI NIDJA 127 3000 444 for 8 characters<br>or<br>BNI NIDJA XXX 127 3000 444 for 11 characters |
| | Branch name address (with postcode, town, country): Gedung Perpustakaan Pusat Universitas Indonesia, Kampus UI Depok, Depok, Jawa Barat, Indonesia, 16424<br><br>Address of payee (with postcode, town, country): Fakultas Ilmu Komputer, Kampus UI Depok, Depok, Jawa Barat, Indonesia, 16424<br><br>Phone number or payee: +62 21 786 3419 |
| There will be additional fees ($50/page or Rp 883.450/page) if your paper is more than 6 pages, and please be sure that your paper is not more than 10 pages.<br><br>Transfer fees transactions are charged to the author.<br><br>Make sure one of the author(s) of the paper registers to the conference by September 30, 2026, at the latest (September 15, 2026 at the latest for early bird). Please fill in the following form: `https://bit.ly/iwbis2026-regist` (Form submission needs to log in from Google account.)<br><br>We do not provide printed proceeding onsite, please contact us if you need one. There is an additional charge to print and ship it to your address | |

## 5.3 Registration Notes

- At least one author of each accepted paper must register by **30 September 2026**.
- Authors and non-presenting participants may register at: `https://bit.ly/iwbis2026-regist`
- The registration form requires a Google account.
- Virtual registration is available. Details of the Zoom link or meeting ID will be distributed closer to the event.

# Conference Platform

## ON-SITE PARTICIPATION

The workshop will take place at the **Faculty of Computer Science, Universitas Indonesia**. The committee will announce the session rooms together with the final program.

| Activity | Venue |
|---|---|
| Plenary and keynote sessions | Auditorium Indro Suwandi |
| Parallel sessions | Classrooms, Level 2, Zone 3; and Sidang rooms |

Detailed room assignments for each session will be communicated with the final program.

## VIRTUAL PARTICIPATION

Virtual participants may join the conference through the Zoom links provided below. Please select the meeting room corresponding to the session you wish to attend. All times are in Western Indonesian Time (WIB / UTC+7).

| Agenda | Location | Time (WIB) | Zoom Link |
|---|---|---|---|
| Keynote and Invited Speaker Sessions | Auditorium | 08:00–17:00 | https://ui-ac-id.zoom.us/j/92719186686 |
| Invited Speaker Talk | Ruang Sidang | 08:00–09:45 | https://ui-ac-id.zoom.us/j/98044390105 |
| Parallel Session 1 | A3.50 | 10:00–11:45 | https://ui-ac-id.zoom.us/j/94612956168 |
| Parallel Session 2 | A3.54 | 10:00–11:45 | https://ui-ac-id.zoom.us/j/94609616922 |
| Parallel Session 3 | A4.50 | 10:00–11:45 | https://ui-ac-id.zoom.us/j/92113097077 |

*Click "Join Zoom" to access the corresponding meeting. The listed times indicate the meeting availability windows; please refer to the Program Schedule for individual presentation times.*

# Technical Program

The detailed technical program below is scheduled for **Sunday, 18 October 2026**, from **10:00 to 11:45 GMT+7**. Each presentation is allocated **20 minutes**, including 15 minutes for the presentation and 5 minutes for questions, answers, and transition.

## 7.1 Parallel Session 1: Cybersecurity & Cryptography

| | |
|---|---|
| **Time** | 10:00–11:45 GMT+7 |
| **Session Chair** | Amril Syalim, Ph.D. |
| **Location** | A3.54 — Classroom, Level 2, Zone 3 |
| **Zoom Link** | https://ui-ac-id.zoom.us/j/94612956168 |

| No. | Paper Title | Authors |
|---|---|---|
| 1 | *Latviz: A Process Visualization for ML-KEM, ML-DSA, and Lattice-Based Cryptanalysis Using LLL and BKZ* | Jeslyn Theodora; Muhammad Imam Chaidar Mujaddid Al-Ghiffari; Amril Syalim Universitas Indonesia |
| 2 | *Channel-Aware Backdoor Attacks Against Federated Infostealer Malware Classification Using Dynamic API-Call and Network Representations* | Mochamad Asryl Aziz BPS Bantaeng; Moh. Jabir Mubarok Institut Teknologi Sepuluh Nopember; Eka Fitria Universitas Syiah Kuala |
| 3 | *Real-Time Security Monitoring Hub with Telegram Bot API Integration for Instant Threat Alerting in a Laravel-Based Corporate Web Application* | Yakhof Kalladzi Mustohar Bahaudin President University |
| 4 | *A Human-in-the-Loop Approach to Capturing the Challenges Posed by Hidden Online Gambling Promotion Sites in Indonesia* | Abdul Azzam Ajhari Universitas Indonesia / UNSIA; Rizal Fathoni Aji; Aprinaldi Jasa Mantau; Wisnu Jatmiko Universitas Indonesia |
| 5 | *Analysis and Implementation of the Lattice-Based Quantum-Resistant Digital Signature Algorithm CRYSTALS-Dilithium* | Dhafin Fadhlan Kamal Universitas Indonesia |

## 7.2 Parallel Session 2: NLP & Analytics

| | |
|---|---|
| **Time** | 10:00–11:45 GMT+7 |
| **Session Chair** | Satrio Baskoro Yudhoatmojo, Ph.D. |
| **Location** | A3.50 — Classroom, Level 2, Zone 3 |
| **Zoom Link** | https://ui-ac-id.zoom.us/j/94609616922 |

| No. | Paper Title | Authors |
|---|---|---|
| 1 | *Geospatial Sentiment Analysis and Interactive Mapping of Hospital Services Using Support Vector Machine* | Boutefhika Nuha Ziyadatul Khair; Andika Neviantoro; Sudianto<br>Telkom University |
| 2 | *Geographic Sentiment Patterns and Venue-Level Variability in Cafe Reviews Using Machine Learning* | Jordan Angkawijaya; Naswa Malika Putri; Sudianto<br>Telkom University |
| 3 | *Do AI Models Reflect Indonesian Values? A Probe-Based Audit of Collectivism-Individualism Bias in Foundation Models* | Abdul Aziz; Muhammad Hatta Eka Putra; Aris Budi Santoso; Indra Budi<br>Universitas Indonesia |
| 4 | *Interpretable Detection of Psychological Distress Tendency on Reddit Using Hybrid Linguistic and DSM-5 Features with MentalBERT* | Supriadi; Ika Alfina; Evi Yulianti; Grafika Jati; Wisnu Jatmiko<br>Universitas Indonesia; University of Bologna, FEV, Italy |
| 5 | *A Comparative Study of Pretrained Language Models Under Varying Training Data Sizes for Sentiment Analysis in Indonesian Local Languages* | Willy Wilsen; Ika Alfina; Evi Yulianti; Nur Hamid; Wisnu Jatmiko<br>Universitas Indonesia; King Fahd University of Petroleum and Minerals |

## 7.3 Parallel Session 3: Computer Vision, Data Structure & Governance

| | |
|---|---|
| **Time** | 10:00–11:45 GMT+7 |
| **Session Chair** | Muhammad Febrian Rachmadi, Ph.D. |
| **Location** | A4.50 — Classroom, Level 2, Zone 3 |
| **Zoom Link** | https://ui-ac-id.zoom.us/j/92113097077 |

| No. | Paper Title | Authors |
|---|---|---|
| 1 | *Blockchain Adoption Challenges in Finance: A Comparative Study of Banking and Insurance Sectors* | Isyrofi Susianto Universitas Indonesia; Geri Yesa Ermawan Politeknik Statistika STIS; Setiadi Yazid Universitas Indonesia |
| 2 | *Table Detection in Document Images with Borderless and Partially Ruled Layouts: A Step Toward Table Understanding* | Alvin Sarraga; Alon Adamson University of De La Salle |
| 3 | *Attention-Enhanced Dense U-Net for Road and Building Segmentation in High-Resolution Aerial Imagery* | Gilang Mantara Putra Universitas Indonesia; Muhammad Anwar Masum Adelaide University; Laksmita Rahadianti; Aniati M. Arymurthy; Wisnu Jatmiko Universitas Indonesia |
| 4 | *Agentic AI on National Digital Identity Big Data: Extending the FrontCRM Framework for Citizen Relationship Management* | Wira Perdana; Muhammad Nuh Al Azhar; Eko K. Budiardjo; Wisnu Jatmiko Universitas Indonesia |
| 5 | *Model-Based Parameter Optimization for Bloom Filter and Cuckoo Filter Under Dynamic Workloads* | Nyoman Purnama Universitas Primakara; Sudarma Made; Nyoman Putra Sastra; Dewa Wiharta Udayana University |

# Guidelines for Presenters

## 1. Presentation Time and Format

- **Presentation duration.** Each paper is allocated a total of **20 minutes**, comprising 15 minutes for the presentation and 5 minutes for questions, answers, and transition.
- **Language.** All presentations and presentation slides must be delivered in English.
- **Slide format.** Please prepare your presentation slides in **16:9 widescreen** aspect ratio.

## 2. Onsite Presenters

- **Reporting time.** Arrive at your assigned session room at least **10–15 minutes** before the scheduled session starts.
- **Session check-in.** Introduce yourself to the Session Chair and test your presentation before the session begins.
- **Available equipment.** A laptop, projector, and audio system will be provided in each session room.
- **File submission.** Copy your final presentation file in PDF or PowerPoint (`.pptx`) format to the session-room laptop using a USB drive before the session begins or during the preceding break.

## 3. Virtual Presenters

- **Platform.** Virtual presentations will be conducted through Zoom.
- **Pre-session setup.** Join the assigned Zoom room at least **10 minutes** before your session to test your microphone, camera, and screen-sharing function.
- **Display name.** Use the following Zoom display-name format: `Paper ID - Presenter Name`. For example: `101 - Jane Doe`.
- **Technical readiness.** Use a stable internet connection, a quiet presentation environment, and a properly functioning headset or microphone.

# Guidelines for Session Chairs

## 1. Before the Session

- **Check-in.** Arrive at the assigned session room for onsite participation, or join the Zoom room for virtual participation, at least **15 minutes** before the session begins.
- **Presenter attendance.** Verify that all presenters assigned to the session are present, including both onsite and virtual presenters.
- **Presentation materials.** Ensure that onsite presentation files are available on the session-room computer.
- **Virtual readiness.** Confirm that virtual presenters have been granted the necessary co-host and/or screen-sharing permissions.

## 2. During the Session

- **Introduction.** Open the session promptly at the scheduled time, announce the session topic, and introduce each presenter before their talk.
- **Time management.** Maintain the allocation of **20 minutes** per paper: 15 minutes for the presentation and 5 minutes for questions, answers, and transition.
- **Time warnings.** Give each presenter clear time reminders, for example when three minutes and one minute remain.
- **Schedule discipline.** Do not allow presentations to exceed the allocated time, in order to preserve fairness and maintain the published schedule.
- **Question-and-answer moderation.** Facilitate questions from both onsite participants and virtual attendees, including questions submitted through Zoom chat or raised-hand features.
- **Backup question.** If no questions are raised by the audience, prepare at least one relevant question for the presenter.

## 3. No-Shows and Cancellations

- **Fixed schedule.** Do not advance the start times of subsequent presentations when an author is absent or a paper is cancelled.
- **Use of vacant slots.** Maintain the official schedule so that participants joining for a specific paper can attend at the announced time. A vacant slot may be used for a short discussion or recess.

## 4. After the Session

- **Attendance and evaluation.** Record presenter attendance and complete the Session Evaluation and Best Presenter Recommendation form provided by the committee.
- **Closing.** Thank the presenters and audience, then formally conclude the session.

# IWBIS
# 2026

Contact Us:
Faculty of Computer Science
Universitas Indonesia
Kampus UI Depok, Indonesia
16424
Telp: +62 21 786 3419
Fax: +62 21 786 3415
Email: iwbis@cs.ui.ac.id
Website: iwbis.cs.ui.ac.id