

IEEE COINS 2024

IEEE International Conference on Omni-layer Intelligent Systems

London, UK | July 29-31, 2024 | <https://coinsconf.com>



Call for Papers

IEEE COINS includes a multi-disciplinary program, from technical research papers to panels, workshops, and tutorials on the latest technology developments and innovations. IEEE COINS will address all important aspects of the Artificial Intelligence of Things (AIoT) ecosystem. IEEE COINS solicits papers and proposals accompanying submissions for presentations in various Tracks.

Topical Area Tracks

1. Internet of Things: From Edge to Cloud
2. Sensing Devices and Systems for AIoT
3. Circuits and Systems (CAS) Designs AIoT
4. Communications and Networking for AIoT
5. Data-centric Engineering
6. Artificial Intelligence, Machine Learning, and Cognitive Computing
7. Distributed Ledger Technologies and Blockchain
8. Low Power Design and Automation
9. Security and Privacy
10. Intelligent Robots and Systems
11. Embedded AI

Deadlines:

- Manuscript submission: 31 March, 14 April 2024
- Acceptance Notification: 31 May, 2024

Submission:

- <https://tinyurl.com/IEEECOINS2024>
- All presented papers will be submitted to the IEEE Xplore Digital library

Vertical Tracks

1. Smart City
2. Industry 4.0
3. Digital Healthcare and Well-being
4. Smart Agriculture
5. Smart Mobility, Transportation, and Logistics
6. Energy and Smart Grids

Special Tracks

1. European Projects on Intelligent Systems
2. Emerging Technologies on Intelligent Systems
3. Work in Progress

Ph.D. Forum

Panels

Diversity, Equity, and Inclusion

Industrial Talks

Workshops/Tutorials

IEEE COINS 2024: IEEE International Conference on Omni-Layer Intelligent Systems

July 29 -31, 2024 | London, UK | Hybrid Event: In-Person and Virtual Presentations

IEEE | IEEE RAS | IEEE COMPUTER SOCIETY

Deadline: ~~March 31~~ April 14, 2024 (AOE)

<http://coinsconf.com>

Are you interested in taking part in shaping and adding new dimensions to the future IoT and AI ecosystem? Are you seeking to harness the opportunities afforded by the tsunami of new technologies? Do you want to stay ahead and learn about the most prominent digital technologies that are radically shifting the paradigm? Or are you just curious about what IoT, AI, and Big Data are all about and how they impact every aspect of our lives, society, and business? IEEE COINS (<https://coinsconf.com/>) is the right place to be. IEEE COINS brings together experts in Digital Transformation (from AI and IoT to Cloud, Blockchain, Cybersecurity, and Robotics) from around the globe. IEEE COINS includes a multi-disciplinary program from technical research papers to panels, workshops, tutorials, demos, and exhibitions on the latest technology developments and innovations addressing all critical aspects of the IoT/AI ecosystem.

Call for Papers

IEEE COINS solicits papers and proposals accompanying submissions for presentations in various tracks.

Topical Area Tracks:

- 1) Internet of Things: From Device to Edge and Cloud
- 2) Sensors and Sensing Systems
- 3) Circuits and Systems for Artificial Intelligence and the Internet of Things
- 4) Communications, Connectivity, and Networking
- 5) Big Data, Data Engineering, and Data Analytics
- 6) Artificial Intelligence, Machine Learning, and Cognitive Computing
- 7) Distributed Ledger Technologies and Blockchain
- 8) Design Automation in the AI & IoT Era: From Chips to Systems
- 9) Security and Privacy
- 10) Intelligent Robots and Systems
- 11) Applications, Processes, and Services

Vertical Tracks:

- 1) Smart City
- 2) Industry 4.0
- 3) e-Health and Wearable IoT
- 4) Agriculture
- 5) Smart Energy
- 6) Mobility and Smart Transportation

Special Tracks:

- 1) Critical System Design
- 2) European Projects on Intelligent Systems

- 3) Emerging Technologies on intelligent systems
- 4) Cyber-physical system

Demo and Exhibition:

- 1) Artificial Intelligence
- 2) Internet of Things (IoT)
- 3) Embedded Systems
- 4) Big Data, Data Engineering, and Data Analytics
- 5) Communications, Connectivity, and Networking
- 6) Distributed Ledger Technologies and Blockchain

IEEE COINS will publish accepted papers in the conference proceedings, and the proceedings will be submitted to the IEEE Xplore Digital library and indexing services.

Submissions should follow the IEEE formatting guidelines. Your submission must not include information that serves to identify the authors of the manuscript, such as name(s) or affiliation(s) of the author(s), anywhere in the manuscript, abstract, or in the embedded PDF data. References and bibliographic citations to the author(s) own published works or affiliations should be made in the third person.

Note: Each paper must be no more than six pages (including the abstract, figures, tables, and references), double-columned, 10pt font. Accepted papers are allowed six pages in the conference proceedings free of charge. Each additional page beyond six pages is subject to the page charge of 150.00 EUR per page up to the eight-page limit.

Call for Speakers & Panels

Are you an executive, strategist, or professional working in the fields of IoT, Big Data, AI/ML, Blockchain, Cloud Computing, or Robotics? The purpose of the **COINS Pavilion** is to present content that is interesting to both the **technical** and **business audiences** that attend COINS. There are three options when submitting a proposal:

1. **Panels** (45 minutes long). The topic of each panel should be interesting, timely, and relevant to multiple segments of COINS attendees. Controversy is appropriate and encouraged.
2. **Individual (Technical or Demo) oral presentations** (20 minutes long) without any paper submission. If any presenters would also like to submit **a technical research paper** for publication, then that option is available, if desired. All submitted papers will be peer-reviewed for acceptance in IEEE Xplore, and there is no guarantee that papers submitted by invited presenters will be accepted.
3. **Mini-keynotes** (each 10-minute presentation | ideally C-level speakers).

If you are interested in being a speaker and/or recommending a speaker, demoing a product/service, or submitting a panel proposal, please provide the following information to Farshad Firouzi (coins2024@coinsconf.com):

- Organizer(s) name, affiliation, bio, and email address
- Presenter(s) name, affiliation, bio, and email address
- Title and abstract (max 500 words)

Ph.D. Forum - Call for Submissions

The Ph.D. forum will be hosted by the IEEE Council on Electronic Design Automation (CEDA) and will be organized as a poster session with 1-minute 1-slide oral introductions from the students to get the attention of the audience. The forum will provide an opportunity for graduate students to explore their research interests in an interdisciplinary workshop under the guidance of a panel of distinguished experts in the field of Computer-aided design and Circuit and Systems for the Internet of Things (IoT), Artificial Intelligence (AI), Big Data and Security/Privacy. The Ph.D. forum aims at bringing together young Ph.D. students to exchange their research, ideas, and experiences.

The following two classes of students are eligible:

- Students who have finished their Ph.D. thesis within the last 12 months
- Students who are close to completing their thesis work.

Submission: A 2-page extended abstract describing the novelties and advantages of the thesis work as a single PDF file via the submission website. The abstract should also include name and affiliation.

Call for Special Sessions, Tutorials and Workshops

IEEE COINS seeks proposals for i) Special Sessions consisting of peer-reviewed papers focused on in-depth treatment on a topic of timely interest to the IEEE COINS audience. Special session papers will undergo the same intense review process as regular conference papers, and submission is not a guarantee of acceptance. The selected papers will be published as part of the IEEE COINS Proceedings; ii) Tutorial Sessions consisting of discussions and summary results about advanced topics relevant to the conference. Tutorials intend to highlight innovative ideas positioned on each field's frontiers covered by the conference. Tutorials provide participants the chance to explore innovative trends or innovative applications, learn new techniques from experts in the field, and gain knowledge and insights. Typical tutorials run 1.5-2 hours, although longer half-day tutorials (two-session blocks of 1.5-2 hours each) may be considered; iii) Workshops are half or one-day events that aim to foster active discussion on issues related to specific fields. The typical structure of a workshop will include a number of papers (peer-reviewed), presentations, and/or invited talks (without paper submission). Accepted manuscripts will be included in the COINS conference proceedings as workshop papers and will be submitted to the IEEE Xplore Digital library and indexing services.

All proposals (1 to 2 pages) should be submitted online via easychair. Please include the required information indicated below:

- Title and abstract of the workshop/tutorial/special session
- Organizers and their affiliations (including short bios)
- Structure, format, and the expected duration of the tutorial/workshop (for a tutorial/workshop proposal)
- Planned invited speakers (if any) for workshop/tutorial proposals (it is not necessary, nor a requirement)
- Provide a sample call for papers (if any) for a workshop and Special Session proposals, the number of published papers (if any), and, if available, a list of prospective authors and contributions
- CFP Dissemination plan (workshop and special session proposals)
- Provide the abstract of the tutorial/workshop (for a tutorial/workshop proposal)
- If the workshop/tutorial was previously held, provide the location (i.e., which conference), date, number of published papers (if any), and number of attendees at

the last event

Call for Demos and Exhibition

IEEE COINS has many opportunities to showcase your company and products, including exhibit/suite space, special promotional opportunities, customer meetings, and social functions. The Demo/Exhibition of IEEE COINS is for companies who want to promote their brand and gain better exposure to the community. The combination of both the presentation theater and the dedicated exhibit aisle will maximize learning and brand exposure. All requests should be submitted online via easychair.

Call for Sponsorship

On behalf of the Organizing Committee of the IEEE COINS, we invite your sponsorship of the conference. As a sponsor of this conference, you will enjoy the opportunities to interact closely with worldwide researchers in academia and industry and the top-notch postgraduate students and practitioners in the field. Your participation will increase your visibility in the community and industry. It will also provide you with an unrivaled opportunity to network with key players and demonstrate your innovative services and products. Your financial support will ensure that the costs of the conference remain accessible for students and will improve the quality of the conference experience for all attendees worldwide.

We offer five levels of sponsorship. We also welcome any customized sponsorship proposals to best suit your needs. If you have any creative or interactive ideas for activity, we would be interested in talking to you about how we can incorporate them into a personalized package.

Please do not hesitate to get in touch with us (coins2024@coinsconf.com) if you have any questions or suggestions for the conference and the engagement of attendees with the sponsors. Thank you very much in advance for your attention and your support!

IMPORTANT DATES

Papers submission:	March 31 April 14, 2024
Notification of acceptance:	May 31, 2024
Camera-ready paper due:	June 20, 2024 (Hard Deadline)

SUBMISSION

EasyChair: <https://easychair.org/my/conference?conf=ieeecoins2024>

All presented papers will be submitted to the IEEE Xplore Digital library

SPONSORS & SUPPORTERS

IEEE RAS, IEEE Computer Society, IEEE CEDA, IEEE Region 8 – Europe, Middle East, and Africa
IEEE UK Section, Neural Systems and Applications TC (IEEE CASS), Control, Robotics, and
Mechatronics TC (IEEE IES), eHealth TC (IEEE ComSoc)

ORGANISATION

General Co-Chairs:

Amit Singh, University of Essex, UK
Payam Barnaghi, Imperial College London, UK

Program Co-chairs:

Geoff Merrett, University of Southampton, UK
Rishad Shafik, Newcastle University, UK
Eiman Kanjo, Imperial College London, UK

BOARD:

Krishnendu Chakrabarty, Arizona State University (Co-Founder & Steering Committee Co-Chair)

Jan M. Rabaey, UC Berkeley

David Z. Pan, University of Texas at Austin

Majid Sarrafzadeh, UCLA

Farshad Firouzi, Duke University | Arizona State University (Co-Founder & Steering Committee Co-Chair)

Mahmoud Daneshmand, Stevens Institute of Technology

Honggang Wang, University of Massachusetts Dartmouth

Bahar Farahani, PISI | Cyberspace Institute

ADVISERS:

Latif Ladid, University of Luxembourg

LOCAL CHAIRS:

Bipin Rajendran, King's College London

Oswaldo Simeone, King's College London

DIVERSITY AND INCLUSION CHAIRS:

Bahar Farahani, PISI | Cyberspace Institute

Naghm Saeed, University of West London

TREASURER:

Kun-Chih Chen, National Yang Ming Chiao Tung University, Taiwan

PUBLICATION CHAIRS:

Aurora Gil de Castro, University of Cordoba, Spain

Florenc Demrozi, University of Stavanger, Norway

REGISTRATION CHAIRS:

Federica Zonzini, University of Bologna

Amna Anwar, Nottingham Trent University

TUTORIAL CHAIRS:

Naghmeh Karimi, University of Maryland, Baltimore County

Dilip K Prasad, UiT Norway

WORKSHOP CHAIRS:

Xiaojun Zhai, University of Essex
Dhaval Thakker, University of Hull

SPECIAL SESSION CHAIRS:

Toktam Mahmoodi, King's College London
Sharad Sinha, IIT Goa
Shreejith Shanker, Trinity College Dublin

PUBLICITY CHAIRS:

Oktay Cetinkaya, University of Oxford
Woon-Hong Yeo, Georgia Institute of Technology
Roberta Bardini, Politecnico di Torino
Tatiana Kalganova, Brunel University London
A V Subramanyam, IIT Delhi
Xiaohang Wang, Zhejiang University

SPONSORSHIP CHAIRS:

Sangeet Saha, University of Essex
Riazul Islam, University of Aberdeen

EUROPEAN PROJECTS CHAIRS:

Virginia Pilloni, University of Cagliari
Francesca Marcello, University of Cagliari
Marco Zennaro, International Centre for Theoretical Physics (ICTP), Italy

INTERNATIONAL LIAISON CHAIR:

Leila Ismail, United Arab Emirates University

FINANCE CHAIR

Jimmy Chen, National Yang Ming Chiao Tung University (NYCU), Taiwan

PAPER-FREE ORAL PRESENTATION CHAIRS:

Eduardo Weber Wächter, University of Warwick
Zeba Khanam, BT Applied Research

PH.D. FORUM CHAIRS:

Thomas Johnson, Nottingham Trent University
Kieran Woodward, Nottingham Trent University

TRACK CHAIRS:

INTERNET OF THINGS (IOT): FROM EDGE TO CLOUD

Sukhpal Singh Gill, Queen Mary University of London

Minxian Xu Shenzhen, Institutes of Advanced Technology, Chinese Academy
Science (SIAT)

CIRCUITS AND SYSTEMS (CAS) DESIGNS FOR AIOT

Jimmy Chen, National Yang Ming Chiao Tung University

Elisa Donati, Universität Zürich

DIGITAL HEALTHCARE AND WELL-BEING

Amir Aminifar, Lund University

Rodrigo Aviles, University of Sussex
Elisabetta Farella, Fondazione Bruno Kessler
Behnaz Ghoraani, Florida Atlantic University

INTELLIGENT ROBOTS AND SYSTEMS

Mary He, IEEE UK, and Ireland Robotics & Autonomous Systems Chapter
Elizabeth Rendon-Morales, University of Sussex

COMMUNICATIONS AND NETWORKING FOR AIOT

Syed Ali Raza Zaidi, University of Leeds
Mohammed El-Hajjar, University of Southampton

EMERGING TECHNOLOGIES ON INTELLIGENT SYSTEMS

Mian Ahmad Jan, University of Sharjah
Fazl Ullah, University of Nottingham Ningbo
Sohail Abbas, University of Sharjah

SENSING DEVICES AND SYSTEMS FOR AIOT

Domenico Balsamo, Newcastle University
Michele Magno, ETH Zurich

SECURITY AND PRIVACY

Francesco Regazzoni, University of Amsterdam
Alexandra Dmitrienko, University of Würzburg

DISTRIBUTED LEDGER TECHNOLOGIES AND BLOCKCHAIN

Michaella Pettit, nChain

DATA-CENTRIC ENGINEERING (BIG DATA)

Deepayan Bhowmick, Newcastle University
Andrew Hyde, University of Cambridge

ARTIFICIAL INTELLIGENCE, MACHINE LEARNING, AND COGNITIVE COMPUTING

Tatiana Kalganova, Brunel University (London)
Elhadj Benkhelifa, Staffordshire University

EMBEDDED AI

Alex Serb, University of Edinburgh
Tinoosh Mohsenin, Johns Hopkins University

SMART CITY

Anish Jindal, Durham University

ENERGY AND SMART GRIDS

Vahid Vahidinasab, Nottingham Trent University

SMART AGRICULTURE

Marcin Plociennik, Poznan Supercomputing and Networking Center (PSNC)
Ioanna Roussaki, National Technical University of Athens (NTUA)

INDUSTRY 4.0 AND SMART MANUFACTURING

Gerhard Hancke, City University of Hong Kong
Gabor Sziebig, SINTEF Manufacturing

SMART MOBILITY, TRANSPORTATION, AND LOGISTICS

Haitao He, Loughborough University
Lam Siew Kei, Nanyang Technological University, Singapore

LOW POWER DESIGN AND AUTOMATION

Bibhas Ghoshal, IIT Allahabad
John Jose, IIT Guwahati

VOLUNTEERS:

Michael Gibbs, Nottingham Trent University
Bradley Patrick, Nottingham Trent University