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IEEE Future Directions Newsletter



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Feature Article

IEEE publication focused on practical business matters seeks articles from technical communities

Michael Condry, President TEMS

IEEE Technology and Engineering Management Society (TEMS) is seeking articles for its latest publication focused on practical business matters, called Engineering Management Review (EMR). The publication seeks articles from IEEE technical communities summarizing the status of your technology evolution, its research directions, and challenges to stimulate business interest in your programs from industry leaders. The publication reaches an audience of business decision makers and may eventually lead to more interest to your initiatives from their companies. [Read more.](#)

Technology Policy and Ethics

IEEE Future Directions considers the reflection of technology through the lens of social implications a key tenet of our work as we incubate and promote technologies. We are seeking submissions of original content, short articles of 800-1200 words on the social implications of technology, including but not limited to policy and ethics topics. If interested please email, FDPolicyEthics@ieee.org.

Artificial Intelligence and Autonomous Systems: Why Principles Matter

by Alan Winfield and Mark Halverson

In this article, we trace the development of general principles for artificial intelligence (AI) and autonomous systems, from Asimov to the current time, and the standards that are now emerging from those principles. In the context of this article a general principle is defined simply as a rule, or guide to action, which embodies an underlying ethical principle.

IEEE Future Directions Communities



[Read more.](#)

Upsetting the Apple Cart - Are FinTechs a Threat to Banks?

by Heike Menne-Spohr and Dr. Mohammad Saud Khan

Financial technology or FinTech, is a business which mainly uses software to provide financial services to customers, thereby, disrupting the traditional financial landscape, which focuses more on what the banks will offer and less on what the customer wants. FinTechs are affecting the way people think about banking and how they do their banking. They are attracting millennials (born between 1982 and 2004), who are high earning customers prioritising fast, easy, flexible, and inexpensive banking solutions over personal services. Big data companies like Google, Apple, and Facebook are also accessing this market and add an additional dimension to mobile banking.

[Read more.](#)

New Technology Proposal List

Through its committee and Industry Advisory Board, the IEEE Future Directions has compiled and is maintaining a list of new technology areas for consideration. For more detailed information, please visit the [IEEE Future Directions New Technology Proposal List page](#).

You are welcome to submit new ideas. To submit one, please fill out this [form](#). For more information, please contact IEEE Future Directions at ieee-fd@ieee.org.

Current Activities in our Technical Communities

IEEE 5G:

Call for Papers - IEEE 5G World Forum (5GWF'18) - 9-11 July 2018

The 2018 IEEE 1st 5G World Forum (5GWF'18) in Santa Clara, California, seeks contributions on how to nurture and cultivate 5G technologies and applications for the benefit of society. [Click here](#) for the online Call for Papers.

[Visit the portal.](#)

IEEE Cloud Computing:

Call for Papers-Cloud Summit 2018

The IEEE Cloud Computing Initiative will be sponsoring the First IEEE Cloud Summit in Las Vegas, NV, USA from Friday 12 January to Saturday 13 January 2018. The summit is co-sponsored by the International Conference on Consumer Electronics (ICCE 2018), co-located with CES® trade show. The paper acceptance rate of Cloud Computing track in ICCE 2017 is around 30%. The Cloud Summit 2018 will continue the success of its predecessor. Academic researchers and industry practitioners are invited to present cutting-edge research and best practices in Cloud Computing as it applies to Consumer Electronics. The goal of the Summit is to exchange ideas among all interested parties thereby leading to advancement of Cloud Computing and Consumer Electronics.



[Visit the portal.](#)

IEEE Cybersecurity:

The IEEE Cybersecurity Initiative is excited to announce the opening of the competition for two new awards:

- The IEEE Cybersecurity Award for Practice
- The IEEE Cybersecurity Award for Innovation

These awards will recognize individuals who have generated transformative cybersecurity capabilities and concepts. More information and full entry form can be found [here](#).

[Visit the portal.](#)

IEEE Digital Senses:

[Sign up](#) for the latest information on Digital Senses.

[Visit the portal.](#)

IEEE Life Sciences:

The IEEE Life Sciences Conference will focus on multi-society perspectives on personalized healthcare and wearables. It will take place in Sydney, Australia 13-15 December 2017. [Learn more.](#)

[Visit the portal](#)

IEEE Smart Grid:

Check out this latest [Q&A](#) with Jennifer Reeves, Senior Product Manager for outage and integrated damage assessment management solutions, as well as a user interface/user experience (UI/UX) modernization product strategy manager for GE's Grid Solutions.

[Visit the portal.](#)

IEEE Transportation Electrification:

Read the current issue of the [IEEE Transportation Electrification eNewsletter](#) featuring the following articles:

- Letter from the Editor in Chief
- A History of Silicon Carbide (SiC) Advancement: Basic Research to Product Applications
- 2017 Electric Ship Technologies Symposium
- The Little Ferry Setting a Big Example in Urban River Transport

[Visit the portal.](#)

IEEE Internet of Things:

WF-IoT Call for Technical Papers

The 4th IEEE World Forum on the Internet of Things (WF-IoT 2018), to be held in Singapore on 5-8 February, 2018, seeks original technical paper submissions. Information pertaining to formatting the technical paper, submission instructions, and deadlines can be found on the [WF-IoT website](#); a full description of topics for which papers are being sought can be found in the [extended CFP](#).

[Visit the portal.](#)

IEEE Software Defined Networks:

IEEE SDN recently held the successful 3rd IEEE Conference on Network Softwarization from 3-7 July 2017 in Bologna, Italy. This leading event brought together academia and industry to examine developments related to Network Softwarization and the path to 5G. The conference proceedings are now available in *IEEE Xplore*. Access the proceedings [here](#).

[Visit the portal.](#)

IEEE Smart Cities:

[Sign up](#) for this IEEE Community to receive the latest information on Smart Cities.

[Visit the portal.](#)

IEEE Symbiotic Autonomous Systems Initiative:

Today, we are at a crossroads, whereby continued advances in computerization and digitalization are bringing significant transformative changes that will impact society worldwide, revolutionizing global business operations and fundamentally altering how inanimate objects are perceived in a world increasingly reliant on autonomous systems. Watch our latest webinar with Raj Madhavan and Roberto Saracco, co-chairs of the IEEE Symbiotic Autonomous Systems Initiative, describing these transformations and the impact to technology and society. [watch the webinars](#).

[Read more.](#)

IEEE Big Data:

Big Data initiatives in the US and throughout the world have provided a unique window of opportunity for the electric power industry. Following a series of activities on big data for power and energy systems, the IEEE is pleased to announce the first IEEE Utility Big Data Workshop, organized by Le Xie, TAMU and Jeff Katz, IBM. This one-day workshop was recently held in San Antonio, Texas, USA and co-located with the Intelligent System Applications to Power Systems (ISAP) conference. [Read more.](#)

Call for papers: The IEEE Workshop on Big Data Metadata and Management (BDMM)

IEEE BDMM will take place in Boston, MA, USA 11-14 December 2017. Full workshop paper submissions are due by 10 October 2017. [See details.](#)

[Visit the portal.](#)

IEEE Rebooting Computing:

IEEE Rebooting Computing Week will take place 6-10 November 2017 in Washington, D.C., USA. Join IEEE as we convene great thinkers around the discussion of what we should expect as we enter a new era of computing. Hear from trailblazers in hardware, software, low energy, and high performance computing. [Read more.](#)

[Visit the portal.](#)

IEEE Green ICT:

The upcoming Greening through ICT Summit will examine opportunities in which information and communications technology (ICT) is used as a tool to improve environmental and societal functions, and where it improves the energy efficiency, carbon footprint and life cycle management of ICT itself. The Summit, to be held on 3 October 2017 in Paris, aims to identify the combination of key technological, commercial and public policy challenges that must be overcome to achieve sustainability in our increasingly connected world. More information about this compelling gathering can be found at our [website](#).

[Visit the portal.](#)

IEEE Brain:

Register now for the IEEE Brain Initiative Brain Sensors Workshop in Glasgow! Check out the exciting agenda for this one-day collaborative workshop on "Sensing the Brain." Speakers include Adam Marblestone from Kernel. The workshop is taking place November 2nd, immediately following the IEEE SENSORS Conference 2017 in Glasgow, Scotland. For more details visit our [website](#).

[Visit the portal.](#)

IEEE Future Directions Events

[Greening through ICT Summit \(GtICT\)](#), 3 October 2017, Paris, France. Last Chance to Register! The summit is an interactive forum that will examine how information and communications technology (ICT) can be used a tool to improve environmental and societal functions, and to improve the energy efficiency, carbon footprint and lifecycle management of ICT itself. Learn more and register on our [website](#).

[IEEE Brain Initiative 2017 Challenges and Competitions Brain-Signal Data Bank Visualization & Analytics](#), 31 October 2017, Glasgow, Scotland, adjacent to IEEE Sensors Conference 2017.

[IEEE Rebooting Computing Week](#)

Kicks off with the [International Roadmap for Devices and Systems \(IRDS\) Workshop](#) scheduled for 6-7 November 2017, followed by the [IEEE International Conference on Rebooting Computing](#) (ICRC) to be held 8-9 November 2017, and then concludes with the [Industry Summit on the Future of Computing](#) on 10 November 2017. All of the IEEE Rebooting Computing Week events will be held at The Ritz-Carlton Hotel in McLean, VA, USA.

[IEEE Life Sciences Conference](#)

13-15 December 2017, Sydney, Australia

Submission/Subscribe Information

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