



**Oklahoma International Publishing, USA**  
**2024 Spring OkIP Academia & Industry Convention**

*2024 OkIP International Conference on Artificial Intelligence Frontiers (CAIF)*

*2024 OkIP International Conference on Business Frontiers (CAIF)*

*2024 OkIP International Conference on Energy and Sustainable Technologies (CEST)*

*2024 OkIP International Conference on Advances in Parallel and Distributed Computing (APDC)*

*2024 IEEE OKC Spring Webinar Series*

*“Fostering Artificial Intelligence, Business and Sustainable Innovation for the Benefit of Humanity”*

*Smart Tools, Methods  
and Applications in  
Computing, Energy,  
Business, and Health*

Online & Oklahoma City, OK, USA

Tentative Program Draft

April 3, 2024

Central Time, Oklahoma, USA

OkIP

1911 Linwood Blvd Ste 100

Oklahoma City, Oklahoma 73106, USA

+1 405-510-6431

info@okipublishing.com

www.okipublishing.com

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# **Oklahoma International Publishing, USA**

## **2024 Spring OkIP Academia & Industry Convention**

### **Message from The OkIP Secretariat**

We thank all those Program Committee Members, Authors, Keynote & Invited Speakers, Reviewers, Staff, and Participants who contributed to this event. The program is on a universal 24-hour clock format [00:00-23:00].

### **Organizing Committee**

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Tom Jobe, BioInSpire LLC, USA, Advisory Member  
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J. Cecil, Oklahoma State University, USA  
Nesreen Alsbou, University of Central Oklahoma, USA  
Ziho Kang, University of Oklahoma, USA  
Richard Osei, Langston University, OK, USA  
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### International Program Committee

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A Qusef, Princess Sumaya U for Tech., Jordan  
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Akhil Kumar, Penn State U, USA  
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Amina Omrane, U of Sfax-Tunisia, Tunisia  
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Ankit Vora, Ford Motor Company, USA  
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Yousef Farhaoui, Moulay Ismail U, Morocco



## Oklahoma International Publishing, USA 2024 Spring OkIP Academia & Industry Convention

### Conference Start Day and Time Per Time Zones

The program is on a universal 24-hour clock format [00:00-23:00] starting at the below time, depending on your geographical location.

<b>City/Region/Country</b>	<b>Time Zone</b>	<b>Day</b>	<b>Conference Start Time</b>
Oklahoma City, OK, USA	CST (UTC -6)	Wed, Apr 03, 2023	09:00
London, United Kingdom	GMT (UTC +0)	Wed, Apr 03, 2023	15:00
Tokyo, Japan	JST (UTC +9)	Thu, Apr 05, 2023	00:00
New Delhi, India	IST (UTC +5:30)	Wed, Apr 03, 2023	21:30
Douala, Cameroon	WAT (UTC +1)	Wed, Apr 03, 2023	16:00
Montréal, Canada	EST (UTC -5)	Wed, Apr 03, 2023	10:00
Clemson, SC, USA	EST (UTC -5)	Wed, Apr 03, 2023	10:00
Eupen, Belgium	CET (UTC +1)	Wed, Apr 03, 2023	16:00
San Diego, CA, USA	PST (UTC -8)	Wed, Apr 03, 2023	07:00
Beijing, China	CST (UTC +8)	Wed, Apr 03, 2023	23:00
Awasa, Ethiopia	EAT (UTC +3)	Wed, Apr 03, 2023	18:00
Rio de Janeiro, Brazil	BRT (UTC -3)	Wed, Apr 03, 2023	12:00
Islamabad, Pakistan	PKT (UTC +5)	Wed, Apr 03, 2023	20:00
Baghdad, Iraq	AST (UTC +3)	Wed, Apr 03, 2023	18:00
Bucharest, Romania	EET (UTC +2)	Wed, Apr 03, 2023	17:00
Moscow, Russia	MSK (UTC +3)	Wed, Apr 03, 2023	18:00



**Oklahoma International Publishing, USA**  
**2024 Spring OkIP Academia & Industry Convention**

**2024 Spring OkIP Conference**

*“Smart Tools, Methods & Applications in Computing, Energy, Business, and Health”*  
**Tentative Program**

**Wednesday, April 03, 2023, US Central Time**

**Wednesday, April 03, 2023**

08:30 - 08:55	<b>Individual Zoom Testing and Configuration</b>
08:55 - 09:00	<b>Welcome Message</b>
09:00 - 10:20	<b>#Artificial Intelligence in the Healthcare Industry</b> Session Co-Chairs <ul style="list-style-type: none"><li>• Franklin Lartey, Cox Communications, USA#</li><li>• Jeffrey Wilson, OGE Energy Corp &amp; IEEE OKC, USA+</li></ul>
09:00 - 10:00	<b><u>Academia Keynote/IEEE OKC Distinguished Speaker</u></b> <b>#+ AI Revolution in the Healthcare Enterprise</b> Ram D. Sriram, PhD National Institute of Standards and Technology, USA
10:00 - 10:20	<b>#Reducing Errors in Electronic Medical Records</b> <ul style="list-style-type: none"><li>• Lynda Sellami, University of Burgundy</li><li>• Khaled Sellami, University of Bejaia</li><li>• Piere F. Tiako, CITRD Lab, Oklahoma City</li></ul>



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Wednesday, April 03, 2023

10:20 - 11:20	<b>+Machine Learning in Business, Computing and Society</b> Session Co-Chairs <ul style="list-style-type: none"><li>• Nesreen Alsbou, University of Central Oklahoma &amp; IEEE OKC, USA#</li><li>• Izzat Alsmadia, Texas A&amp;M University San Antonio, USA*</li><li>• Mike Banad, University of Oklahoma &amp; IEEE OKC, USA+</li></ul>
10:20 - 10:40	<b>#Using Artificial Intelligence (AI) and Machine Learning (ML) to Disrupt the Negative Impact of Disinformation on Digital Sovereignty and Social Stability Through Cognitive Security in Elections</b> <ul style="list-style-type: none"><li>• Joseph Squillace, Penn State University, Schuylkill</li><li>• Justice Cappella, Penn State University, Schuylkill</li></ul>
10:40 - 11:00	<b>+Rating Agreement: Machine Learning and a Format for ESG Disclosure</b> <ul style="list-style-type: none"><li>• Nico Rosamilia, Politecnico di Milano</li></ul>
11:00 - 11:20	<b>*Exploring Vulnerabilities: An In-Depth Analysis of Security Weaknesses Leading to Dark Web Exposure and Improved Security Defenses Using Artificial Intelligence (AI) &amp; Machine Learning (ML)</b> <ul style="list-style-type: none"><li>• Joseph Squillace, Penn State University, Schuylkill</li><li>• Justice Cappella, Penn State University, Schuylkill</li><li>• Andrew Sepp, Penn State University, Schuylkill</li><li>• Joan Young, Penn State University, McKeesport</li></ul>



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Wednesday, April 03, 2023

11:20 - 12:00	<b>+Renewable Energy Applications and Perspectives</b> Session Co-Chairs <ul style="list-style-type: none"><li>• Ammar Natsheh, Dubai Women's College+</li><li>• Ziho Kang, University of Oklahoma &amp; IEEE OKC, USA*</li></ul>
11:20 - 11:40	<b>+Origin and Interests of Geothermal Energy</b> <ul style="list-style-type: none"><li>• Ange Merveille Meguedong Guedia, University of Yaounde I</li><li>• Dieudonne Bisso, University of Yaounde I</li><li>• Pierre Tiako, CITRD Lab Oklahoma City</li><li>• Serge Koah, University of Yaounde I</li></ul>
11:40 - 12:00	<b>*Strategic Energy Management System for Improving the Power Quality of PV-Wind-Battery-based Standalone Microgrids</b> <ul style="list-style-type: none"><li>• Wulfran Fendzi Mbasso, University of Douala</li><li>• Harrison Ambe, University of Buea</li><li>• Serge Raoul Dzone Naoussi, University of Douala</li><li>• Emmanuel Fendzi Donfack, University of Douala</li><li>• Saatong Kenfack Tsobze, University of Douala</li><li>• Reagan Jean Jacques Molu, University of Douala</li></ul>
11:40 - 12:00	<b>#Debt as Catalyst: Empowering Renewable Energy in Developing Countries</b> <ul style="list-style-type: none"><li>• Deepak Kushawaha, Indira Gandhi Institute of Development Research, Mumbai</li></ul>
11:40 - 12:00	<b>#Decoding Arctic Visions: Exploring Energy Transition Narratives through Mayoral Insights using NLP</b> <ul style="list-style-type: none"><li>• Fatma Ahmed, University of Saskatchewan</li><li>• Greg Poelzer, University of Saskatchewan</li></ul>



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Wednesday, April 03, 2023

### #Computing, Power and Energy

Session Co-Chairs

- |       |   |       |
|-------|---|-------|
| 12:00 | - | 01:00 |
|       |   |       |
- Tom Jobe, BioInSpire LLC, Oklahoma & IEEE OKC, USA#
  - Robert Scolli, Southwestern Bell/AT&T (Ret.) & IEEE OKC, USA\*
  - David Schwartzman, University of Oklahoma & IEEE OKC, USA+

### #Experimental Study of Parallel-Connected DC-DC Buck-Boost Converters FPGA Chaos Controlled

- |       |   |       |
|-------|---|-------|
| 12:00 | - | 12:20 |
|       |   |       |
- Ammar Natsheh, Dubai Women's College
  - Thanh Hai Nguyen, Dubai Women's College
  - Preetha Sreekumar, Dubai Women's College

### \*Scheduling for high performance computing with reinforcement learning

- |       |   |       |
|-------|---|-------|
| 12:20 | - | 12:40 |
|       |   |       |
- Scott Hutchison, Kansas State University
  - Daniel Andresen, Kansas State University
  - William Hsu, Kansas State University
  - Benjamin Parsons, Eng. and Research and Development Center, Vicksburg
  - Mitchell Neilsen, Kansas State University

### +Power Quality Improvement of a Standalone Power Supply System Powered by PV, Wind, and Batteries via LSTM-based ANN Controllers

- |       |   |       |
|-------|---|-------|
| 12:40 | - | 01:00 |
|       |   |       |
- Saatong Kenfack Tsobze, University of Douala
  - Reagan Jean Jacques Molu, University of Douala
  - Harrison Ambe, University of Buea
  - Serge Raoul Dzone Naoussi, University of Douala
  - Wulfran Fendzi Mbasso, University of Douala
  - Patrice Wira, University of Haute Alsace





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01:00 - 02:00	<b>+Finance and Digital Models for Economic Growth</b> Session Co-Chairs <ul style="list-style-type: none"><li>• Germain N. Pichop, East Central U, USA+</li><li>• Franklin Lartey, Cox Communications, USA*</li></ul>
01:00 - 01:20	<b>+Retail Central Bank Digital Currency and Deposit Market Competition: Evidence From China</b> <ul style="list-style-type: none"><li>• Xiaoying Li, Indiana University, USA</li></ul>
01:20 - 01:40	<b>* Robustness Analysis of Deep Reinforcement Learning for Online Portfolio Selection [2022 OkIP]</b> <ul style="list-style-type: none"><li>• Marc Velay, University of Paris-Saclay and Lusion</li><li>• Bich-Lien Doan, University of Paris-Saclay</li><li>• Fabrice Popineau, University of Paris-Saclay</li><li>• Arpad Rimmel, University of Paris-Saclay</li><li>• Fabrice Daniel, Lusion, Paris</li></ul>
01:40 - 02:00	<b>+Digital Economy and Artificial Intelligence in Sub-Sahara Industrialization</b> <ul style="list-style-type: none"><li>• Irene Tiako, University of Yaounde II</li><li>• Bernard Nguenkeng, University of Yaounde II</li></ul>
01:40 - 02:00	<b>+The Effect of Capital Adequacy Provisions in the Economic Growth, Regulatory Relief, and Consumer Protection Act on Community Banking</b> <ul style="list-style-type: none"><li>• George Lu, Ohio State University</li></ul>
01:40 - 02:00	<b>+Labor force Heterogeneity and Earnings Management</b> <ul style="list-style-type: none"><li>• Md Ismail Haidar, University of Texas Rio Grande Valley</li></ul>



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### **+Enhancing Artificial Intelligence & Design Methods**

- |       |  |
|-------|--|
| 02:00 | Session Co-Chairs  |
| -     |  |
| 03:00 | <ul style="list-style-type: none"><li>• Dan Morehead, OGE Energy Corp (Ret.) &amp; IEEE OKC, USA#</li><li>• Lynda Sellami, University of Burgundy, France*</li><li>• Franklin Lartey, Cox Communications, USA+</li></ul> |

### **#Integrated Circuit Design using Open Software Source Tools in Doctoral Studies**

- |       |   |
|-------|---|
| 02:00 |   |
| -     |   |
| 02:20 | <ul style="list-style-type: none"><li>• Hertz Pancha, University of Yaounde I</li></ul> |

### **\*The Power of Ontology in the Growth of Artificial Intelligence**

- |       |   |
|-------|---|
| 02:20 |   |
| -     |   |
| 03:00 | <ul style="list-style-type: none"><li>• Emile Tawamba, University of Douala &amp; La Cite College of Ottawa</li></ul> |

### **+Assessing the Impact of Interactivity in the Cognitive Domain: A Noise Ratings Case Study [2022 OkIP]**

- |                  |  |
|------------------|--|
| <del>02:20</del> |  |
| -                |  |
| <del>03:00</del> | <ul style="list-style-type: none"><li>• Flaithri Neff, Technological University of the Shannon, Limerick</li><li>• Patrick Duffy, Technological University of the Shannon, Limerick</li><li>• Malachy Ronan, Technological University of the Shannon, Limerick</li></ul> |



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	<p><b>*Strengthening Businesses and Smart Computing</b></p> <p>Session Co-Chairs</p> <ul style="list-style-type: none"> <li>• Franklin Lartey, Cox Communications, USA*</li> <li>• David Bueno Vallejo, University of Malaga, Spain+</li> <li>• Bernard K. Foguem, Tarbes U of Technology, France#</li> <li>• Hyacinthe Aboudja, Oklahoma City U (Ret.) &amp; IEEE OKC, USA%</li> </ul>
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	<p><b>*Recent Surveys on Optimal Transport for Machine Learning</b></p> <ul style="list-style-type: none"> <li>• Bernard Kamsu Foguem, Tarbes University of Technology</li> <li>• Piere F. Tiako, CITRD Lab, Oklahoma City</li> <li>• S. L. Msouobu Gueuwou, Kwame Nkrumah U of Science and Technology</li> <li>• Cheick A. K. A. Kounta, University of Science and Technology of Bamako</li> </ul>
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03:20 - 03:40	<p><b>#A better model? Testing of Fama and French six-factor model in a Frontier Stock Market</b></p> <ul style="list-style-type: none"> <li>• Mehak Younus, SZABIST</li> </ul>
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03:40 - 04:00	<p><b>+Algorithmic vs. Machine Learning Approaches for Solving Dynamic Particle Motion Problems</b></p> <ul style="list-style-type: none"> <li>• Munenyashaishe Hove, Data Scientist</li> </ul>
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04:00 - 04:20	<p><b>% Decoding Anomalies: Unveiling Asset Pricing Models in an Emerging Market</b></p> <ul style="list-style-type: none"> <li>• Mehak Younus, SZABIST</li> </ul>
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03:40 - 03:45	<p><b>Closing Remarks</b></p>
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# Oklahoma International Publishing, USA

## 2024 Spring OkIP Academia & Industry Convention

Wednesday, April 03, 2023

### Zoom Link, Information, and OkIP WhatsApp Number

**OkIP WhatsApp:** +1 405-510-6431

**Topic:** 2024 OkIP Spring Conference / 2024 IEEE OKC Spring Webinar Series

**Time:** Apr 3, 2024, 08:50 AM Central Time (US and Canada)

#### Join Zoom Meeting

<https://us06web.zoom.us/j/87900644743?pwd=knvGLjyfzKU7vG45ixY0an85ONsQmb.1>

**Meeting ID:** 879 0064 4743

**Passcode:** 745572

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- +1 305 224 1968 US
- +1 309 205 3325 US
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- +1 564 217 2000 US
- +1 646 931 3860 US
- +1 689 278 1000 US
- +1 929 205 6099 US (New York)
- +1 301 715 8592 US (Washington DC)

**Meeting ID:** 879 0064 4743

**Passcode:** 745572

**Find your local number:** <https://us06web.zoom.us/j/87900644743?pwd=knvGLjyfzKU7vG45ixY0an85ONsQmb.1>



Wednesday, April 03, 2023

## **Keynote/IEEE-Distinguished Speaker Talk and Bio**

### **AI and Digital Transformation: Industry Driven Partnerships**

Dr. Ram D. Sriram  
Chief of the Software and Systems Division  
Information Technology Laboratory  
National Institute of Standards and Technology.

#### **Talk:**

Artificial Intelligence (AI) is concerned with the development of computer programs that emulate the intelligence of humans, i.e., AI is deeply concerned with the understanding of human problem-solving strategies and incorporating (or simulating) these strategies into computer programs. The health care enterprise involves many different stakeholders -- consumers, health care professionals and providers, researchers, and insurers. AI will play an important role in many tasks that these stakeholders undertake. These include: image diagnostics, medical decision making, prior authorization, drug design, nutrition advisor, patient scheduling, etc.. The National Institute of Standards and Technology (NIST) is an agency of the United States Government. NIST's mission is to generally strengthen the U.S. economy and improve the quality of life by working with industry to develop and apply technology, measurements and standards. The U.S. President's Executive Order on AI calls for NIST to lead the development of appropriate technical standards for reliable, robust, trustworthy, secure, portable, and interoperable AI systems. I will discuss relevant AI thrusts at NIST on health care informatics, focusing on the use of machine learning, knowledge representation and natural language processing.

#### **Short Biography:**

Ram D. Sriram is currently the chief of the Software and Systems Division, Information Technology Laboratory, at the National Institute of Standards and Technology. Before joining the Software and Systems Division, Sriram was the leader of the Design and Process group in the Manufacturing Systems Integration Division, Manufacturing Engineering Laboratory, where he conducted research on standards for interoperability of computer-aided design systems.



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Prior to joining NIST, he was on the engineering faculty (1986-1994) at the Massachusetts Institute of Technology (MIT) and was instrumental in setting up the Intelligent Engineering Systems Laboratory. Sriram has co-authored or authored nearly 300 publications, including several books and videos. Sriram was a founding co-editor of the International Journal for AI in Engineering. Sriram received several awards including: an NSF's Presidential Young Investigator Award (1989); ASME Design Automation Award (2011); ASME CIE Distinguished Service Award (2014); the Washington Academy of Sciences' Distinguished Career in Engineering Sciences Award (2015); ASME CIE division's Lifetime Achievement Award (2016); CMU CEE Lt. Col. Christopher Raible Distinguished Public Service Award (2018); IIT Madras Distinguished Alumni Award (2021); IEEE Reliability Lifetime Achievement Award (2023). Sriram is a Fellow of AAIA, ACM, AIBME, ASME, AAAS, IEEE, INCOSE, SMA, and Washington Academy of Sciences, and a Senior Member (life) AAAI. He is also an Honorary Member of IISE, a distinction he shares with Lee Iaccoca (Chrysler chairman), Von Braun (Rocket pioneer), and Herbert Hoover (U.S. President). Sriram has a B.Tech. from IIT, Madras, India, and an M.S. and a Ph.D. from Carnegie Mellon University, Pittsburgh, USA.