



## **The International Workshop on AI and Big Data on the Web: Insights, Challenges, and Applications (AIBD)**

### **Heading**

- Proposed duration (half-day or full-day)  
Half-day

- Workshop/special session (co-)chair(s) name, affiliation and e-mail address  
Dr. Mark Chai  
Affiliation: Northwest Missouri State University, USA  
Email: schai@nwmissouri.edu

- Short CV of (co-)chair(s) including past experience in organizing workshops/special session and/or related events  
Dr. Mark Chai is an Assistant Professor at Northwest Missouri State University, specializing in big data analytics, AI, and web intelligence. He has extensive research experience in high-dimensional data processing and machine learning applications. Dr. Chai has published numerous articles in high-impact journals and regularly contributes to the WI-IAT conference. He has successfully organized the EHDD workshop of WI-IAT 2024. His current research focuses on developing scalable and efficient methods for processing large-scale web data. Dr. Chai's expertise and organizational experience make him well-suited to lead the AIBD workshop.

## **Introduction**

- Abstract: one paragraph describing the workshop/special-session purpose (max. 200 words)

The AIBD workshop aims to bring together researchers, practitioners, and industry professionals to discuss the latest advancements, challenges, and applications of AI and big data on the web. As the digital landscape continues to expand, efficient techniques for processing and analyzing vast amounts of online data are crucial. This workshop will explore state-of-the-art methods in dimensionality reduction, feature selection, and data representation, with a focus on applications in domains such as healthcare, finance, and social media. The workshop will foster discussions on challenges like data sparsity, scalability, and ethical concerns, promoting interdisciplinary collaborations and innovative solutions for big data challenges on the web.

- Scope and topics of the workshop/special session

The workshop welcomes submissions on, but not limited to, the following topics:

- AI-driven big data analytics applications in healthcare, finance, and social media
- Web-scale dimensionality reduction techniques
- Feature selection and extraction in large datasets
- Deep learning models for big data analysis
- Challenges in handling large-scale, high-dimensional data
- Privacy, security, and ethical considerations in web AI

## **Motivation and Rationale**

- Why the workshop/special session is related to WI-IAT 2025

The AIBD workshop is closely aligned with the main themes of WI-IAT 2025, emphasizing web intelligence, big data analysis, and AI applications. Given the growing dependence on web big data for essential decision-making in sectors like healthcare, finance, and social media, this workshop holds significant relevance.

- Why the topic is timely and important

The swift expansion of the web data presents both significant challenges and opportunities in data analysis with AI model. It is vital to understand how to effectively derive insights from large-scale, high-dimensional data.

This workshop tackles these issues by discussing AI methods and big data web applications.

- Why the workshop/special session may attract a significant number of submissions of good quality

We expect to receive submissions from a diverse group of researchers, industry experts, and data scientists engaged in AI, big data, and web intelligence. The workshop's interdisciplinary approach encourages contributions from various fields, ensuring a high standard of submissions.

- Why the workshop/special session may attract a large number of attendees, in addition to the authors

We foresee participation from a broad spectrum of attendees, including researchers, practitioners, and students with an interest in AI, big data, and web intelligence. The practical significance of the workshop topics is likely to draw not just authors but also a wider audience.

- Why the workshop/special session differs from others

What sets AIBD apart from other workshops is its focus on the relationship between AI and big data specifically in the context of the web. It promotes discussions on both theoretical developments and practical applications, distinguishing it from more general big data workshops.

- Related workshops and conferences of similar topics

Similar events include AAAI, IEEE Big Data, ICDM, KDD, and other conferences centered on web intelligence. However, AIBD uniquely concentrates on AI and big data in web applications, addressing a crucial gap in the field.

### **Workshop /Special Session Details**

- Tentative committee lists (organizers, program committee, etc.)

#### Organizer:

Dr. Mark Chai, Northwest Missouri State University, USA

#### Program committee:

Dr. Zhengrui Qin, Northwest Missouri State University, USA

Dr. Lantian Guo, Qingdao University of Science and Technology,  
China

Dr. Xianrong Zheng, Old Dominion University, USA

- Expected number of participants and the expected number of submissions

Expected Number of Participants: 10-40

Expected Number of Submissions: 10-20

- A short list of potential authors that are expected to submit papers to the workshop/special session

Dr. Xianrong Zheng, Old Dominion University, USA

Dr. Mark Chai, Northwest Missouri State University, USA

Dr. Lantian Guo, Qingdao University of Science and Technology, China

- A draft call for papers (max 1 page)

See attachment

- A description of the publicity and promotion plan

Promote the workshop via social media (University news bullets, LinkedIn, etc.)

Collaborate with research groups and professional organizations

Email announcements to relevant academic mailing lists

Create a dedicated workshop website with submission details

- Workshop/special session format planned (keynote, expected number of presented papers, invited talks, panels, demonstrations, etc.)

Keynote Presentations: As Research Scientist of Google and faculty of University of Iowa, Dr. Weiran Wang will be invited to deliver presentations alongside renowned experts in AI and big data.

Paper Presentations: We expect to accept 10-20 high-quality papers and abstracts for presentation. Each paper will be allocated 20 minutes, followed by a 10-minute Q&A session.

Invited Talks: Dr. Ajay Bandi, Associate Professor of Northwest Missouri State University, will be invited to share his insights on emerging trends and challenges in AI and big data on the web.

Panel Discussions: A panel discussion will be organized with invited speakers, industry professionals, and authors to discuss key challenges, future directions, and potential collaborations in the field.

**Tentative Internal and External Schedule (Except adjustments by the Chairs to align all workshop/special session schedules)**

- Submission deadline: 20th August 2025
- Review deadline: 10th September 2025
- Acceptance deadline: 17th September 2025
- Camera ready: 10th October 2025
- Program ready: 10th November 2025

Attached, A draft call for papers (max 1 page)



### **The International Workshop on AI and Big Data on the Web: Insights, Challenges, and Applications (AIBD)**

#### **Introduction:**

The International Workshop on AI and Big Data on the Web: Insights, Challenges, and Applications (AIBD) aims to bring together researchers, practitioners, and industry professionals to discuss the latest advancements, challenges, and applications of AI and big data on the web. As the digital landscape continues to expand, efficient techniques for processing and analyzing vast amounts of online data are crucial. This workshop will explore state-of-the-art methods in dimensionality reduction, feature selection, and data representation, with a focus on applications in domains such as healthcare, finance, and social media. The workshop will foster discussions on challenges like data sparsity, scalability, and ethical concerns, promoting interdisciplinary collaborations and innovative solutions for big data challenges on the web. <https://www.wi-iat.com/wi-iat2025/Workshops-Special-Sessions.html>

#### **Topics:**

The workshop will cover but is not limited to:

- AI-driven big data analytics applications in healthcare, finance, and social media
- Web-scale dimensionality reduction techniques
- Feature selection and extraction in large datasets
- Deep learning models for big data analysis
- Challenges in handling large-scale, high-dimensional data
- Privacy, security, and ethical considerations in web AI

#### **Important Dates:**

- Submission deadline: 10th August 2025
- Review deadline: 10th September 2025
- Acceptance deadline: 17th September 2025
- Camera ready: 10th October 2025
- Program ready: 10th November 2025

#### **Submission Information:**

We invite submissions that are one-page abstracts, short (4 pages)/full (8 pages) papers, case studies, surveys, and technical papers

#### **On-Line Paper Submission**

<https://www.wi-iat.com/wi-iat2025/Participant-Submission.html>

**Workshop Chair:** Mark Chai, Northwest Missouri State University

**Contact Information:** For inquiries regarding the workshop and submission process, please contact Mark at [schai@nwmissouri.edu](mailto:schai@nwmissouri.edu).

**We look forward to your contributions and participation in AIBD!**