Call for TIME 2025 Workshop Paper Submissions

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In today's digital landscape of privacy breaches, misinformation, and algorithmic bias, this workshop fosters cross-domain collaboration, applying successful techniques across fields. By bridging academia and industry, it aims to translate research into actionable solutions for modern web challenges.

The relevance of this workshop has never been greater, as web technologies increasingly influence sectors as varied as social media, healthcare, and e-commerce, each of which faces unique yet overlapping challenges. For example, privacy practices developed in healthcare can inform data security methods in social networks [Gu et al.(2024), Zhang et al.(2024a), Zhang et al.(2024b)], while fairness in content moderation for social media can inspire transparency standards for e-commerce algorithms [Smith et al.(2024)]. The workshop's collaborative structure provides a timely response to these challenges, enabling researchers, practitioners, and domain experts to work together on practical guidance [Duan et al.(2024), Jiang et al.(2024)], comprehensive evaluations [Kiyohara et al.(2024), Saito et al.(2024), Shcherbakov et al.(2024), Jin et al.(2024), Bae et al.(2024)], and cuttingedge methodologies. This approach not only fosters the development of robust, responsible web technologies but also builds an accessible knowledge base that aligns with The Web Conference's mission of promoting ethical, transparent, and secure principles in the web's ongoing evolution.

We invite submissions on a wide range of topics (5 themes), including but not limited to the following areas:

- i. Survey nature. Authors are encouraged to provide comprehensive overviews of specific fields, summarizing state-of-the-art approaches, frameworks, and findings. These surveys are crucial for identifying trends and knowledge gaps that can inform future research directions. For example:
 - Video processing techniques: A review of current methodologies, highlighting advancements in compression, enhancement, and analysis across various applications.
 - Data-centric video analytics: An exploration of data-driven approaches in video content analysis, with an emphasis on machine learning applications.
- ii. **Evaluation focus.** We invite critical evaluations of existing solutions and their implications, fostering nuanced analyses of strengths and weaknesses. Relevant topics include:

- Ethical and trustworthy AI for healthcare: An examination of frameworks ensuring transparency and accountability in healthcare AI systems.
- Security and privacy in clinical AI: A review of security measures and privacy protections in clinical AI applications.
- Video content moderation: An evaluation of the effectiveness of current methods for moderating video content on social media, focusing on accuracy and ethical implications.
- iii. **Review of methodologies.** We welcome critiques of various methodologies, exploring opportunities for improvement or adaptation. Suggested topics include:
 - Data standards and annotation for AI/ML: A review of best practices and standards for data annotation and their implications for model performance.
 - Robust and interpretable Large Language Models (LLMs) for healthcare: An analysis of advancements in LLMs, focusing on interpretability and reliability.
 - Video analysis for social media content: An exploration of algorithms for detecting and analyzing motion in videos shared on social media, examining implications for content moderation and audience engagement.
- iv. **Cross-disciplinary insights.** We encourage interdisciplinary discussions that broaden evaluation scope and promote diverse perspectives. Potential topics include:
 - Smart city applications: How web technologies enhance urban living and governance through AI-driven solutions.
 - Combatting online extremism: Strategies for detecting and reducing harassment and hate speech.
 - Human-centric video analytics: Implications of analyzing human motion in videos, with applications in health, security, and social behavior.
- v. **Addressing emerging challenges.** We aim to tackle current issues, prompting evaluations of existing strategies and proposing recommendations for future research. Areas of interest include:
 - Misinformation and disinformation in crisis situations: Evaluating the impact of misinformation during crises and current strategies to combat it.
 - Quality, uncertainty, and trust in discourse data: A critical examination of reliability and provenance in discourse data, addressing quality and trust implications.
 - Challenges in video quality assessment: A review of methodologies for assessing video quality and their implications for user trust and content engagement.

References

[Bae et al.(2024)] Hong-Kyun Bae, Yebeen Kim, Hyunjoon Kim, and Sang-Wook Kim. 2024. Negative Sampling in Next-POI Recommendations: Observation, Approach, and Evaluation. In WWW '24. 3888–3899.

[Duan et al.(2024)] Moming Duan, Qinbin Li, and Bingsheng He. 2024. ModelGo: A Practical Tool for Machine Learning License Analysis. In *WWW '24*. 1158–1169.

- [Gu et al.(2024)] Hongyan Gu, Xinyi Zhang, Jiang Li, Hui Wei, Baiqi Li, and Xinli Huang. 2024. Federated Learning Vulnerabilities: Privacy Attacks with Denoising Diffusion Probabilistic Models. In *WWW '24*. 1149–1157.
- [Jiang et al.(2024)] Xuhui Jiang, Chengjin Xu, Yinghan Shen, Yuanzhuo Wang, Fenglong Su, Zhichao Shi, Fei Sun, Zixuan Li, Jian Guo, and Huawei Shen. 2024. Toward Practical Entity Alignment Method Design: Insights from New Highly Heterogeneous Knowledge Graph Datasets. In *WWW '24*. 2325–2336.
- [Jin et al.(2024)] Yiqiao Jin, Mohit Chandra, Gaurav Verma, Yibo Hu, Munmun De Choudhury, and Srijan Kumar. 2024. Better to Ask in English: Cross-Lingual Evaluation of Large Language Models for Healthcare Queries. In *WWW '24*. 2627–2638.
- [Kiyohara et al.(2024)] Haruka Kiyohara, Masahiro Nomura, and Yuta Saito. 2024. Off-Policy Evaluation of Slate Bandit Policies via Optimizing Abstraction. In *WWW* '24. 3150–3161.
- [Saito et al.(2024)] Yuta Saito, Himan Abdollahpouri, Jesse Anderton, Ben Carterette, and Mounia Lalmas. 2024. Long-term Off-Policy Evaluation and Learning. In *WWW '24*. 3432– 3443.
- [Shcherbakov et al.(2024)] Mikhail Shcherbakov, Paul Moosbrugger, and Musard Balliu. 2024. Unveiling the Invisible: Detection and Evaluation of Prototype Pollution Gadgets with Dynamic Taint Analysis. In *WWW '24*. 1800–1811.
- [Smith et al.(2024)] Michael Smith, Antonio Torres-Agüero, Riley Grossman, Pritam Sen, Yi Chen, and Cristian Borcea. 2024. A Study of GDPR Compliance under the Transparency and Consent Framework. In *WWW '24*. 1227–1236.
- [Zhang et al.(2024a)] Qiuchen Zhang, Hong kyu Lee, Jing Ma, Jian Lou, Carl Yang, and Li Xiong. 2024a. DPAR: Decoupled Graph Neural Networks with Node-Level Differential Privacy. In *WWW '24*. 1170–1181.
- [Zhang et al.(2024b)] Yanjun Zhang, Ruoxi Sun, Liyue Shen, Guangdong Bai, Minhui Xue, Mark Huasong Meng, Xue Li, Ryan Ko, and Surya Nepal. 2024b. Privacy-Preserving and Fairness-Aware Federated Learning for Critical Infrastructure Protection and Resilience. In *WWW* '24. 2986–2997.