The International World Wide Web Conference Committee Selects
"*A Contextual-Bandit Approach to Personalized News Article Recommendation*"
for the 2023 Seoul Test of Time Award

Research published in 2010 to be recognized by IW3C2 for profound and lasting impact on the field

Austin, Texas, USA, May 2nd 2023 – The International World Wide Web Conference Committee (IW3C2) announced today that the 2023 Seoul Test of Time Award will be presented to the authors of the paper "A Contextual-Bandit Approach to Personalized News Article Recommendation;" Wei Chu, *(Ant Group),* Lihong Li*, (Amazon),* John Langford, *(Microsoft)* and Robert Schapire *(Microsoft).*

The award will be presented during the opening ceremony of the 32nd international conference in The ACM Web Conference series (formerly known as International World Wide Web Conference, abbreviated as WWW), hosted by the team in Austin. See https://www2023.thewebconf.org for details.

The paper was first presented at the 19th International World Wide Web Conference in Rayleigh Durham, USA in April 2010. It now has more than 2,730 citations and has become foundational research in the area of recommendation systems.

Ryen White, Chair of the Seoul Test of Time Award Committee, said:
"This landmark paper proposed a new approach for personalized recommendation using contextual bandit algorithms. Bandits have since been adopted for recommendation in a wide variety of settings. The paper addressed fundamental challenges in real-world recommendation systems via computationally efficient algorithms grounded in learning theory. It also showed that recommendation algorithms can be reliably evaluated offline, enabling algorithm selection without operational impact, and that contextual bandits can yield significant gains in user engagement."

Dame Wendy Hall, Chair of IW3C2, said: "IW3C2 is very happy to present the 2023 Seoul Test of Time award to the authors of this paper which the award committee felt has made profound technical, theoretical and practical contributions to the field. It still has a strongly increasing annual citation rate, many years after publication, demonstrating its lasting impact."

Lihong Li, one of the authors, comments:
"We are thrilled and honored to receive this incredible award. Back in 2010, typical approaches to recommendation aimed at improving rating prediction accuracy on a dataset. Our work was based on the observation that recommendation was essentially a decision making problem, naturally formulated as reinforcement learning. Starting with the simple yet powerful contextual bandit model, we were able to study some of the fundamental issues, such as online exploration and offline evaluation, on an Internet-scale problem. After publishing the paper, we are excited to see numerous extensions to our work, and many industrial applications of contextual bandits and their variants such as in Azure Personalizer, Amazon, Netflix, and New York Times, to name a few.

About the Seoul Test of Time Award
Inaugurated in 2014, the Seoul Test of Time Award is made possible by the generous contribution of the organisers of WWW2014 held in Seoul, South Korea, in May 2014. It is awarded annually to the author or authors of a paper presented at a previous World Wide Web conference that has, as the name suggests, stood the test of time.

The first Award, presented at WWW2015 in Florence, was made to Google founders Sergey Brin and Larry Page, for their world-changing paper "The Anatomy of a Large-Scale Hypertextual Web Search Engine," originally presented at the World Wide Web Conference in Brisbane in 1998.

About The Web Conference
Since its first event, in 1994 at CERN, The Web Conference (formerly the World Wide Web or WWW Conference) has provided scientists, researchers, policy makers, activists and technology industry leaders with the forum to discuss the evolution of Web and its impact on business, culture and society. From 1994 the conference was organized each year by a local team of volunteers in different parts of the world in collaboration with the International World Wide Web Conference Committee (IW3C2) which managed the conference series.

In 2022 IW3C2 handed over the management of The Web Conference series to the Association of Computing Machinery (ACM) and it became a full ACM conference. The IW3C2 continues to exist to manage the Seoul Test of Time award but it will no longer be responsible for managing conferences.

About ACM
ACM, the Association for Computing Machinery, is the world's largest educational and scientific computing society, uniting computing educators, researchers, and professionals to inspire dialogue, share resources, and address the field's challenges. ACM strengthens the computing profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.