## Computer Science Colloquium

## Wenbin Zhang

**Department of Computer Science** 

## Friday, April 14 • 3-4 p.m. Rekhi 214 and Zoom



**Talk Title:** Fairness with Censorship: Bridging the Gap between Fairness Research and Real-world Deployment

**Talk Abstract:** Recent works in artificial intelligence fairness attempt to mitigate discrimination by proposing constrained optimization programs that achieve parity for some fairness statistics. Most assume the availability of class label which is impractical in many real-world applications such as precision medicine, actuarial

analysis and recidivism prediction. To this end, this talk revisits fairness and reveals idiosyncrasies of existing fairness literature assuming the availability of class label that limits their real-world utility. The primary artifacts are formulating fairness with censorship to account for scenarios where the class label is not guaranteed, and a suite of corresponding new fairness notions, algorithms, and theoretical constructs to bridge the gap between the design of a "fair" model in the lab and its deployment in the real-world.

**Speaker Bio:** Wenbin Zhang is an assistant professor in the Department of Computer Science at Michigan Technological University, and an associate member at the Te Ipu o te Mahara Artificial Intelligence Institute. Previously, he was a postdoctoral associate at Carnegie Mellon University after receiving his Ph.D. from the University of Maryland, Baltimore County. Zhang has been a visiting researcher at various global research centers and institutions.

Zhang's research investigates the theoretical foundations of machine learning with a focus on societal impact and welfare. Other interests include deep generative models and health



Scan to read more and find the Zoom link. informatics, with an academic track record across computer science and interdisciplinary venues, such as IJCAI, ICDM, AAAI, Climate Dynamics, and Radiotherapy and Oncology.



