

**Title:** How to experiment without losing customers' trust

**Time:** Nov 16, 2023 3:30-4:30 PM

**Venue:** KD 101

**Abstract:**

In Amazon, everyday we need to make a decision to choose from a list of options that serve our customers. For example, which marketing strategy is better to reach out to our customers? Choosing an option only based on prior experience or anecdotes is fraught with peril. Thus, we conduct controlled experiments to make business decisions that have immediate impact on our customers. But, conducting controlled experiments in an industrial setup is challenging because it can disrupt the business critical systems degrading the customer trust. In this talk, I will discuss our experience in performing experiments in industrial setup. The talk has three topics. First, I will provide an overview of the controlled experiment design and the analysis required to choose the best possible option for our customers. Second, I will also talk about some guidelines which ensure that we can safely conduct experiments in business critical systems. In the end, I will provide some information about the management of the experiment lifecycle.

**Bio:**

Tanmoy Das is an applied scientist at the retail organization of Amazon. He received his BTech in computer science from Jadavpur University in 2010, his MTech in computer science from IIT Madras in 2012, and his PhD in computer science from Ohio State University in 2019. He has previously worked at Microsoft (2012-2014). His research interests are online experiments, multi-arm bandit, causal inference, and reinforcement learning.