Field Trip Reflection

The field trip deepened my understanding of how computational microeconomics functions as both a theoretical and practical framework for analyzing global tech dynamics. Observing the strategies of firms like Amazon (AWS) and Tencent illustrated how computational models—such as game-theoretic simulations, mechanism design, and algorithmic optimization—are applied to enhance efficiency, manage competition, and allocate digital resources. These real-world implementations reflect the power of computational microeconomics in shaping incentives and equilibria in large-scale markets.

However, the experience also highlighted the ethical asymmetries embedded within these systems. While U.S. companies tend to prioritize openness and decentralized market competition, Chinese firms often align with state-guided, centralized mechanisms. Such structural differences demonstrate how computational models, though neutral in theory, can generate divergent outcomes depending on institutional contexts. This underscores the need to incorporate equity, transparency, and accountability into model design—principles directly connected to SDG 10 (Reduced Inequalities)and SDG 16 (Peace, Justice, and Strong Institutions).

From a methodological perspective, the visit reinforced the importance of combining agent-based modeling and data-driven simulation with ethical reasoning to ensure socially responsible outcomes. Computational microeconomics provides the analytical tools to predict and optimize strategic interactions, but liberal arts training cultivates the critical reflection needed to question underlying assumptions and potential biases in these systems. DKU's interdisciplinary model bridges this gap—linking computational rigor with global ethical awareness—to foster innovation that is both technically sound and socially just.

Ultimately, the field experience affirmed that the future of computational economics lies not only in mathematical precision but also in its capacity to serve human-centered and equitable development. By integrating methodological insight with ethical reflection, we can design computational systems that advance innovation while promoting fairness and global well-being.