Disruptive Research and Innovation

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Abstract:

Ever since Clayton Christensen coined the terms "disruptive technologies" and "disruptive innovations" in 1990s, researchers and entrepreneurs love the word "disruptive" because disrupting current knowledge or products help us accelerate knowledge discoveries and moving the society into a new era. What is disruptive research? What is disruptive innovation? How do they happen? To answer such questions, in this talk, I will share my experience from co-leading the ImageNet project which built a knowledge base for computer vision and machine learning community, and from co-founding Data Domain, Inc. which built deduplication storage ecosystems to replace tape library infrastructure in data centers.

Brief Biography:

Kai Li is a Paul M. Wythes '55, P'86 and Marcia R. Wythes P'86 Professor at Princeton University, where he joined the faculty in 1986. He received his Ph.D. from Yale University, M.S. from Chinese Academy of Sciences, and B.S. from Jilin University. His research areas include operating systems, parallel and distributed systems, storage systems, and analysis of large data. He pioneered Distributed Shared Memory (DSM), allowing shared-memory programming on a cluster of computers. His group proposed user-level DMA mechanism for efficient cluster communication, which evolved into the RDMA standard of Infiniband. He co-led the ImageNet project which enabled the computer vision and machine learning community to accelerate their advances. He co-founded Data Domain, Inc. and led the innovation of deduplication storage system products to replace tape libraries at data centers. For Data Domain, he served in roles of chief executive officer, chief technology officer and chief scientist. He is an ACM fellow, an IEEE fellow and a member of National Academy of Engineering.