

The article "50 Years of Data Science" talks about various aspects and developments within the field of data science. The author recognizes that data science is an evidence-based subject and is a blend of traditional statistics and machine learning. Beyond mathematical statistics skills, modern data scientists are required to have the ability to handle big data with computer engineering knowledge. The author also makes the argument that the core motivation for the emergence and expansion of data science is intellectual instead of commercial.

The author believes the Common Task Framework (CTF) is the "secret sauce" of the predictive modeling culture. Nowadays researchers in the machine learning community evaluate their novel algorithms on publicly available datasets, which enhances the reproducibility of machine learning research. However, the described CTF seems to refer to data competitions like Kaggle or DREAM Challenge other than frameworks for utilizing public datasets. I have participated in data competitions and won some of them. Participants in data competitions tend to build heavily ensembled models in order to gain performance improvement. Many winning solutions just leverage ensembling skills other than providing many scientific insights. In my opinion, if the CTFs refers to data competitions, they may be just good for master students or junior Ph.D. student to test their computational skills but should not be emphasized too much on scientific research.