Cranfield is Dead; Long Live Cranfield

Ellen Voorhees
NIST

ABSTRACT
Evaluating search system effectiveness is a foundational hallmark of information retrieval research. Doing so requires infrastructure appropriate for the task at hand, which has frequently entailed using the Cranfield paradigm: test collections and associated evaluation measures. Observers have declared Cranfield moribund multiple times in its 60 year history, though each time test collection construction techniques and evaluation measure definitions have evolved to restore Cranfield as a useful tool. Now Cranfield’s effectiveness is once more in question since corpora sizes have grown to the point that finding a few relevant documents is easy enough to saturate high-precision measures while deeper measures are unstable because too few of the relevant documents have been identified. In this talk I’ll review how Cranfield evolved in the past and examine its prospects for the future.

BIOGRAPHY
Ellen Voorhees is a Fellow at the US National Institute of Standards and Technology (NIST). For most of her tenure at NIST she managed the Text REtrieval Conference (TREC) project, a project that develops the infrastructure required for large-scale evaluation of search engines and other information access technology. Currently she is examining how best to bring the benefits of large-scale community evaluations to bear on the problems of trustworthy AI. Voorhees’ general research focuses on developing and validating appropriate evaluation schemes to measure system effectiveness for diverse user tasks. Voorhees is a fellow of the ACM, a member of the ACM SIGIR Academy, and has been elected as a fellow of the Washington Academy of Sciences. She has published numerous articles on information retrieval techniques and evaluation methodologies and serves on the review boards of several journals and conferences.