An Academic in a Data Wonderland: Five Lessons from Commercial Search

Charles L. A. Clarke

University of Waterloo

Abstract. For over two years, I put my academic research career on hold, left the University of Waterloo, moved to California, and worked to make a large commercial search engine better. In September 2019, I returned to my role as a Professor at the University of Waterloo, but the things I learned in the commercial world will impact my academic research for the rest of my career. While I can't tell you deep, dark secrets, I can you about problems and ideas that are inspired by my experience. These include changes in the way I think about search evaluation, online search behaviour, personalization and query understanding.

Biography. Charlie Clarke is a Professor in the School of Computer Science at the University of Waterloo, Canada. His research interests span the broad field of information retrieval, including search, question answering, and recommendation. He has published over 100 refereed contributions on a wide range of topics, including information retrieval evaluation, user interfaces, filesystem search, natural language processing, machine learning, databases, and XML. He is an ACM Distinguished Scientist and Past Chair of the ACM Special Interest Group on Information Retrieval (SIGIR). He frequently serves on the program committees of major information retrieval conferences, including WSDM, WWW, SIGIR, and CIKM. He was Program Co-Chair for SIGIR in 2007 and 2014. He is a co-author of the book Information Retrieval: Implementing and Evaluating Search Engines, MIT Press, 2010. From August 2016 to August 2018, while on leave from Waterloo, he was an engineering tech lead at Facebook, where he worked on metrics and machine learning for Facebook Search.