

Peter Holmes Prize Announcement 2023

The article entitled “How learners produce data from text in classifying clickbait” by Nicholas J. Horton, Jie Chao, Phebe Palmer and Willam Finzer has been awarded the Peter Holmes prize for 2023.

The aim of this prize is to highlight excellence in motivating practical classroom activity. There has been much said in recent years on involving students in accessing and working with complex, messy, non-traditional, and unstructured data, including visuals and text. Classification of text is not new, but how can we obtain meaning of interest rather than just coding of words and phrases? How can we represent human understanding in extracting features or attributes from a text string to be used as lower level characteristics suitable for computers and how can we help students develop such skills?

Within the context of a larger research project, and with reference to work in text analytics, AI and how learning occurs, this article outlines a developmental student activity to build such skills in natural language processing in a social media context that is sure to greatly engage students, namely distinguishing between news items and misinformation in the form of clickbaiting, defined as headlines that appear in emails or web pages that are designed primarily to get you to click so that you will view advertising on a site. The article describes the scenarios through which the students moved, using and reporting their own words to illustrate their progression. After students were presented with a professional context and the need to identify clickbait, they were then asked to collaboratively classify a few headlines as clickbait or news, agreeing on why. Students were then given a larger set and asked to again agree on distinguishing features which could be used to train others. In the final stage, students classified a large number of headlines, with prompts to assist in making connections between human-perceivable and computer-extractable features.

As the authors comment, this approach can be adapted to school or tertiary level, and a link is provided to a CODAP document to assist those wishing to use this example. Overall, this article embodies the aim and spirit of the Peter Holmes prize in an excellent example of a highly contemporary and engaging context for students to collaboratively and authentically develop understanding of features of text as data, and to begin developing skills in designing text classifications to represent human understanding.

History of the prize

The aim of this prize is to highlight excellence in motivating practical classroom activity. It is a fitting tribute to Peter Holmes who was a pioneer, leader, developer, evaluator and tireless advocate over many decades for the teaching of statistical practice and thinking across school levels and disciplines. He also cogently argued for these at foundational and introductory levels post-school. His advocacy of data investigations in UK school curricula in the 1970's became the Plan, Collect, Process, Discuss (PCPD) description of the statistical data investigation process whose well-established role in statistical education pedagogy and practice is now being matched by similar advocacy in data science. Peter was Director of the Schools Council Project on Statistics Education at the University of Sheffield from 1975-1980. In 1978 the Teaching Statistics Trust was established, with Peter one of the first trustees, and the first editor of *Teaching Statistics* established by the Trust. Peter became the inaugural Director of the Centre for Statistical Education set up in 1983 jointly by University of Sheffield and Sheffield Hallam University, co-chaired by Vic Barnett and Warren Gilchrist. In 1995 when this became the RSSCSE (Royal Statistical Society Centre for Statistical Education) and moved first to Nottingham University and then, in 1999, to Nottingham Trent

University, Peter continued his work with the Centre, contributing to resources, reports and dedication to every aspect of good practice in teaching statistics. He was truly inspirational in everything he did.

We are pleased to honour Peter Holmes' lifetime of achievements in teaching statistics through this prize.

Helen MacGillivray, Editor