conferenceseries.com SciTechnol

Ching Y Suen, J Comput Eng Inf Technol 2017, 6:4(Suppl)
DOI: 10.4172/2324-9307-C1-010

3rd Global Summit and Expo on

MULTIMEDIA & ARTIFICIAL INTELLIGENCE

July 20-21, 2017 | Lisbon, Portugal

Ching Y Suen

Concordia University, Canada

How well can computers recognize handwriting?

Handwriting is one of the most important media for human communication. We write and read every day. Though handwriting can vary considerably in style and neatness, we recognize handwritten materials easily. Actually humans develop their writing skill in their childhood and gradually refine it throughout their lives. This paper examines ways humans write (from primary school to adult writing) and ways of teaching the computer to recognize (handwriting technology) what they produce from ancient (such as carved scripts, old books and documents) to modern times (such as immigration port-of-entry forms, cheques, payment slips, envelopes, and different kinds of notes and messages). Methods such as machine learning and deep classifier structures, extraction of space and margins, slant and line direction, width and narrowness, stroke connections and disconnections will be analyzed with large quantities of data. Both training procedures and learning principles will be presented to illustrate methodologies of enabling computers to produce robust recognition rates for practical applications in the office and in mobile phones. In addition, the art and science of graphology will be reviewed, and techniques of computerizing graphology will be illustrated with interesting examples.

Biography

Ching Y Suen is the Director of CENPARMI and Concordia Honorary Chair on AI & Pattern Recognition. He received his PhD degree from University of British Columbia (UBC) (Vancouver) and his Master's degree from University of Hong Kong. He has served as Chairman of the Department of Computer Science and an Associate Dean (Research) of the Faculty of Engineering and Computer Science of Concordia University. He has served at numerous national and international professional societies as President, Vice-President, Governor, and Director. He has presented 45 invited/keynote papers at conferences and 200 invited talks at various industries and academic institutions around the world. He has been the Principal Investigator or Consultant of 30 industrial projects. His research projects have been funded by the ENCS Faculty and the Distinguished Chair Programs at Concordia University, FCAR (Quebec), NSERC (Canada), the National Networks of Centres of Excellence (Canada), the Canadian Foundation for Innovation, and the industrial sectors in various countries, including Canada, France, Japan, Italy, and the United States. Currently, he is the Editor-in-Chief of the *Journal of Pattern Recognition*, an Adviser or Associate Editor of five journals, and Editor of a new book series on Language Processing and Pattern Recognition.

suen@cse.concordia.ca