# Some Aspects of the Reliability of Information on the Web

**Narayanan Kulathuramaiyer**

(Faculty of Computer Science and Information Technology, University of Malaysia Sarawak
Kota Samarahan, Malaysia
nara@fit.unimas.my)

**Hermann Maurer**

(Institute for Information Systems and Computer Media. Graz University of Technology
Graz, Austria
hmaurer@iicm.edu)

**Rizwan Mehmood**

(Institute for Information Systems and Computer Media. Graz University of Technology
Graz, Austria
rmehmood@iicm.tu-graz.ac.at)

**Abstract:** When we look up information in the WWW we hope to find information that is correct, fitting in quantity for our purposes and written at a level that we can understand. Unfortunately, very often one of the above criteria will not be met. A young person looking for information on some aspect of physics may well be frustrated when finding a complex formula whose understanding requires higher mathematics. In other cases, information may be much too voluminous or too short. This seems to indicate that what we need is presentation of material at various levels of detail and complexity. But most important of all, and this is what we are going to discuss in this paper is: how do we know that what we read is actually true? We will analyse this problem in the introductory section. We will show that it is impossible to expect "too much". We will argue that some improvements can be made, particularly if the domain is restricted. We will then examine certain types of geographical information. Detailed research shows that some quantitative measurements like the area of a country or the highest mountains of a country, even if different sources disagree, can be verified by explaining why the discrepancies occur and by trusting numbers if they are identical in very different databases.

**Keywords:** Reliability of information, verification of information, checking facts, statistical techniques, heuristic approaches
**Categories:** H.1, H.3. H.4, L.1, L.4, L.6

## 1    Introduction

The main aim of this paper is to consider how true (or reliable) information is that we find using some search engine, some special services, Wikipedia, or other databases.

First of all it is necessary to understand that in many cases an objective truth does not exist. After all, many things like historical events or actions of persons can be interpreted in one way or another. Has Lenin's work on communism helped mankind or caused catastrophic events? Has the discovery of nuclear energy made the world a