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Vienna
Gödel
Lectures

Bias in the Web

Ricardo Baeza-Yates
NTENT, California

TU Wien, Lecture Hall EI 7
1040 Vienna, Gußhausstraße 27-29, ground floor



Faculty of Informatics



PROGRAM

VIENNA GÖDEL LECTURES

The annual Vienna Gödel Lectures of the Faculty of Informatics have been inaugurated in 2013 with a talk by Donald E. Knuth. The aim of this series is to increase Vienna's visibility as an academic hotspot of computer science. Furthermore the series emphasizes the importance of computer science and its significant contribution to explaining and shaping the world in which we live today. The lecture series is named after the famous mathematician and logician Kurt Gödel, who accomplished essential parts of his scientific work in Vienna.

Bias in the Web

The Web is the most powerful communication medium and the largest public data repository that humankind has created. Its content ranges from great reference sources such as Wikipedia to ugly fake news. Indeed, social (digital) media is just an amplifying mirror of ourselves. Hence, the main challenge of search engines and other websites that rely on web data is to assess the quality of such data. However, as all people have their own biases, web content as well as our web interactions are tainted with many biases.

Data bias includes redundancy and spam, while interaction bias includes activity and presentation bias. In addition, sometimes algorithms add bias, particularly in the context of search and recommendation systems. As bias generates bias, we stress the importance of debiasing data as well as using the context and other techniques such as explore & exploit, to break the filter bubble. The main goal of this talk is to make people aware of the different biases that affect all of us on the Web. Awareness is the first step to be able to fight and reduce the vicious cycle of bias.

17:30 **Welcome**
Uwe Egly, member of the Dean's team, TU Wien

17:45 **Bias in the Web**
Ricardo Baeza-Yates, NTENT, California
Chair: Stefan Szeider, Institute of Computer Graphics and Algorithms, TU Wien

Biography of Ricardo Baeza-Yates

Ricardo Baeza-Yates areas of expertise are web search and data mining, information re-trieval, data science, and algorithms. He is CTO of NTENT, a semantic search technology company based in California, USA. Before, he was Vice President of Research at Yahoo Labs, based in Barcelona, Spain, and later in Sunnyvale, California, from January 2006 to February 2016. He also is part time Professor at DTIC of the Universitat Pompeu Fabra, in Barcelona, Spain, as well as at DCC of Universidad de Chile in Santiago.

Until 2004 he was Professor and founding director of the Center for Web Research at the later place. He obtained a Ph.D. in CS from the University of Waterloo, Canada, in 1989. He is co-author of the best-seller Modern Information Retrieval textbook published by Addison-Wesley in 2011 (2nd edition), that won the ASIST 2012 Book of the Year award. From 2002 to 2004 he was elected to the Board of Governors of the IEEE Computer Society and between 2012 and 2016 was elected for the ACM Council. Since 2010 he is a founding member of the Chilean Academy of Engineering. In 2009 he was named ACM Fellow and in 2011 IEEE Fellow, among other awards and distinctions.

