You are cordially invited to Math/CS Colloquium Presentation

Google's PageRank and Beyond: The Science of Search Engine Rankings

By
Dr. Amy Langville
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6:40pm - 7:45pm, October 16 (Tuesday)
Graham Copeland Auditorium, Grimsley Hall 117
Refreshments will be served at 6:20pm on the 2nd floor of Thompson Hall.

Abstract
Why is Google so good at what it does? There are a variety of reasons, but one fundamental thing that distinguishes Google and has put it so far ahead of other search engines is its patented PageRank concept. PageRank has revolutionized Web search to the extent that it has been charged in Federal Court with driving the direction of commerce on the Internet. Many mathematicians are therefore surprised when they learn that a technology of such consequence is predicated on the same mathematics that is available to undergraduate students. This talk will survey some of the scientific concepts behind today’s major search engines including Google and Ask.com.

Biography: Dr. Amy Langville joined the faculty of Mathematics at the College of Charleston in 2005. Her mathematical interests include information retrieval, data mining, numerical linear algebra, and integer programming. She is the co-author of "Google's PageRank and Beyond: The Science of Search Engine Rankings", the first book ever about the science of Web page. Last November, Dr. Langville spoke to Congressional representatives on Capitol Hill about the role mathematics plays in some of today's technologies. Her presentation included illustrations of the mathematics behind Google, Sudoku, counterterrorism, email surveillance, and military flight plans.