CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

VIRTUAL COLLOQUIUM

Friday, March 26 3:00 – 4:00 PM

https://ccsu.webex.com/meet/gotchev

THE \$25,000,000,000 EIGENVECTOR: THE LINEAR ALGEBRA BEHIND GOOGLE

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Abstract: When Google went online in the late 1990s, one thing that set it apart from other search engines was that its search result listings always seemed to deliver the "good stuff" up front. With other search engines you often had to wade through screen after screen of links to irrelevant web pages that just happened to match the search text. Part of the magic behind Google is its PageRank algorithm, which quantitatively rates the importance of each page on the web, allowing Google to rank the pages and thereby present to the user the more important (and typically most relevant and helpful) pages first.

I'll show how the classic PageRank algorithm works. It involves nothing more than elementary matrix algebra, but on a matrix with billions of rows and columns!

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