

Sergey Brin



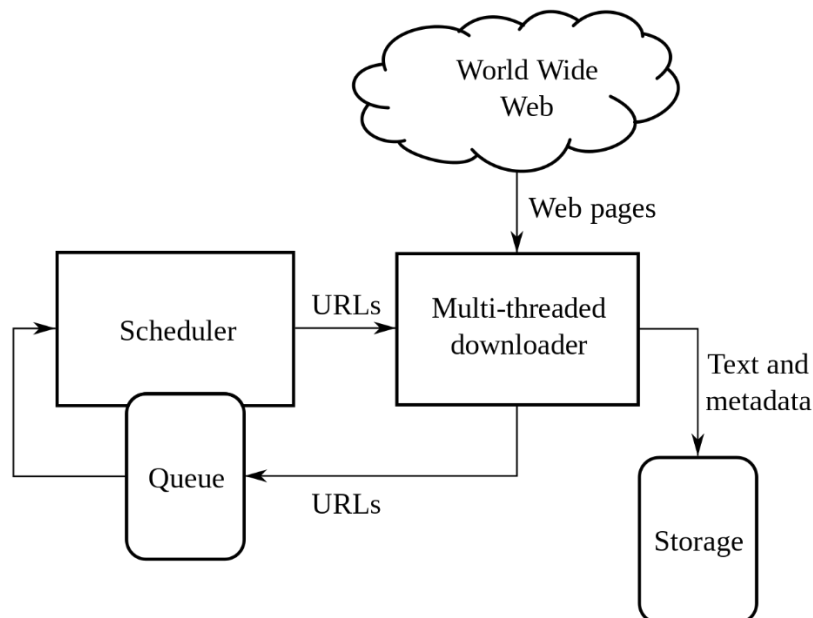
Biography

Sergey Brin was originally born in Moscow in the Soviet Union on August 21 1973. It can be said he was from an intelligent, well-educated family as both his parents were graduates of Moscow State University. Brin's father went on to become a mathematics professor at the University of Maryland whilst his mother Eugenia became a researcher at NASA's Goddard Space Flight Centre. The Brin family tried multiple time to leave the Soviet Union but had difficulty getting their exit visa approved. In May 1979 they were officially granted their exit visas and left Moscow. They spent brief periods in Vienna and Paris whilst Brin's parents secured jobs in America. Brin attended elementary school in Maryland however he received further education at home from his father, Mikhail who encouraged him to learn mathematics. Brin's parents also ensured he did not lose his native tongue and helped him retain his Russian whilst in America. In September 1990 Brin began college at the University of Maryland where he studied Computer Science. In 1993 Brin received his Bachelor of Science from the Department of Computer Science with honours in computer science and mathematics at just 19 years of age. Brin completed an internship at Wolfram Research in 1993, the developers of Mathematica. Brin went on to further his education at Stanford University on a graduate fellowship from the National Science Foundation where he met fellow Co-Founder of Alphabet, known mainly for Google Inc.

Beginning of Google



During an orientation at Stanford University where Brin was completing his PhD, he met Larry Page. Whilst at Stanford they seemingly constantly disagreed with each other on nearly every subject however became 'intellectual soul-mates' and eventually business partners. Brins main focus as on developing data mining systems whilst Page's was more in the important of a research paper based on its citations in other papers. Together they authored a paper entitled "The Anatomy of a Large-Scale Hypertextual Web Search Engine".

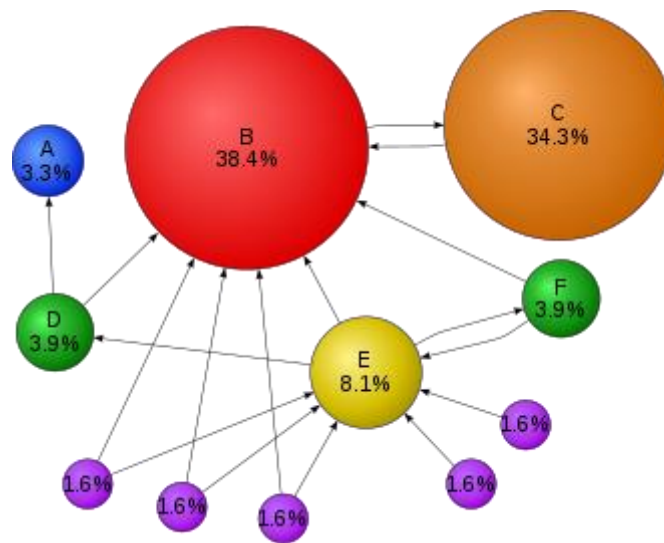


Above is a diagram of the architecture of a Web Crawler. A web crawler often referred to as a spider or a spider Bot in an Internet bot that browses the World Wide Web for the purpose of Web Indexing, which is methods for indexing the contents of a website or the Internet as a whole. At the time search engines returned results which were sorted in terms of relevance to the words searched and how many times they appeared in a web page. Brin & Page wanted to sort these in terms of which website had more links related to other web pages. Their Web Crawler was originally named 'BackRub' and through the backlink data created by this software they developed the PageRank Algorithm which I will go into further detail below.

PageRank Algorithm & Backrub

PageRank is an algorithm used by Google Search in order to rank the web pages in their search engine. PageRank is essentially a way of measuring how important a webpage is. It works by counting the number & quality of links to a page to determine how important the

website is. The underlying assumption presumes that the more important a website is, the more links it will have and the higher quality of the links. PageRank was one of Google's first ever algorithms used and it is still used today among many other algorithms.



Essentially the PageRank algorithm is a link analysis algorithm and it assigns a numerical weighting to every element of a hyperlinked set of documents and attempts to measure its relative importance within this set of hyperlinked documents.

Awards & Accolades

Brin was awarded with many prestigious accolades throughout his career to this day. From early on in his entrepreneurial career himself and Larry Page were named as one of the top 100 innovators under 35 years of age in 2002. Brin was a recipient of an honorary MBA from IE Business School for his entrepreneurial efforts. Brin and Page were also awarded recipients and National Finalists of the EY Entrepreneur of the Year in 2003. They were elected as Fellows the following year in 2004 of the Marconi Foundation at Columbia University. In 2009 Brin and Page were voted as the fifth most powerful people in the world by Forbes. Also in 2009 Brin was inducted into the National Academy of Engineering which according to those in the field is among one of the highest achievements possible for an engineer to receive in his professional career. On a more shallow note in 2021 Brin was named as the 9th wealthiest person in the world with an estimated net worth of €95.6 billion.

Why I chose Sergey Brin

I chose Sergey Brin to report on as I find his story quite remarkable moving around countries young before finally settling in America where he honed his craft and passion for Software. I find his vision to realise the potential of this algorithm he and Larry Page worked together on amazing. On a high level it is rather intuitive and simple however it is the initial thought process and deeper complexity of the problem which I find so interesting. Brin was part of a generation which has changed the world for good and more specifically kicked off a new era in which we value information and data so much.

References

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