# Scholarly Response 2 - Big Data and Analytics

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# September 29, 2024

# LinkedIn's collaborative filtering system, Browsemaps, powers much of the platform's recommendation features. LinkedIn is home to over 300 million professionals, and Browsemaps helps members discover profiles, jobs, companies, and groups by analyzing what others have viewed. It’s like a behind-the-scenes matchmaker, using patterns from user behavior to make connections.

# LinkedIn uses Browsemaps to create recommendations based on the concept of item-to-item collaborative filtering. Simply put, it examines co-occurrences—like when two people view the same profiles or apply for similar jobs—and uses that data to generate suggestions. The beauty of this system is its flexibility. It can scale to meet the needs of LinkedIn’s millions of users without breaking a sweat.

# Browsemaps are computed offline using Hadoop, a system designed for processing massive data sets, and then stored in a distributed database. When you interact with LinkedIn, say by viewing a profile or following a company, your actions feed into this system. Recommendations are crafted to fit your behavior and context, such as showing related jobs after you apply for one or suggesting companies to follow based on your previous activity. The more you engage with LinkedIn, the more personalized your recommendations become.

# From finding “People You May Know” to discovering similar companies, Browsemaps are everywhere on LinkedIn. They also play a big role in helping recruiters identify talent through Similar Profiles, which suggests candidates with similar qualifications. Browsemaps takes the collective wisdom of LinkedIn’s vast user base and turns it into personalized, actionable recommendations. Whether you're exploring new job opportunities or expanding your professional network, these intelligent algorithms ensure you’re always one step closer to the right connections.

# Netflix’s global success goes beyond just great shows, it’s powered by cutting-edge technology. Netflix processes billions of streaming data points using NoSQL databases, specifically Amazon DynamoDB, ensuring fast and smooth experiences for viewers worldwide.

# When Netflix embarked on its global expansion, they needed a NoSQL database that could scale as fast as their audience grew. That’s where AWS DynamoDB came in. This fully managed, serverless NoSQL database allowed Netflix to seamlessly grow its data capacity without manual intervention or worrying about server management. Everything scaled automatically, in real time, based on demand.

# Netflix uses DynamoDB's global tables to replicate data across multiple AWS regions. This ensures low-latency access to user data, no matter where viewers are located. The NoSQL architecture is particularly well-suited for Netflix’s needs, allowing flexible, scalable data storage. Netflix also integrates DynamoDB with AWS Lambda and Amazon API Gateway to handle real-time data processing and power its personalized content recommendations. This system allows Netflix to deliver instant results when users hit "play," for a seamless experience.

# With NoSQL technology at the core, Netflix provides a flawless user experience to millions of subscribers across different regions. Their NoSQL infrastructure lets them automatically scale up during high-traffic periods, such as new series releases, and scale down when demand dips. This flexibility is a huge advantage in the ever-evolving world of streaming.

# Netflix’s streaming success is built on more than just great content, it's about smart, scalable technology. By using NoSQL databases like DynamoDB, Netflix has crafted a system that can handle rapid growth, support real-time data needs, and keep costs optimized. This setup ensures that Netflix will always be able to deliver the content you love, no matter how many people are streaming at once, anywhere in the world!

References

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