Twitter in an RDB

For this project, I used Python and PostgreSQL to simulate the functionality of posting tweets and retrieving home timelines. Below are my results for each functionality.

API Method	API Calls/Sec
post_tweet	4395.2
get_timeline	339.2

My system runs MacOS, has an M1 Pro chip, and has 32 GB of RAM. I believe hardware may significantly impact the performance of either functionality because it often acts as a limiting factor. Regardless of how well architected the programs are, software can always hinder performance. However, I hav relatively extensive hardware and think timeline retrieval was slowed down because of how SQL queries are being executed. There may be more performant ways to get better performance without executing a SQL subquery like I did.