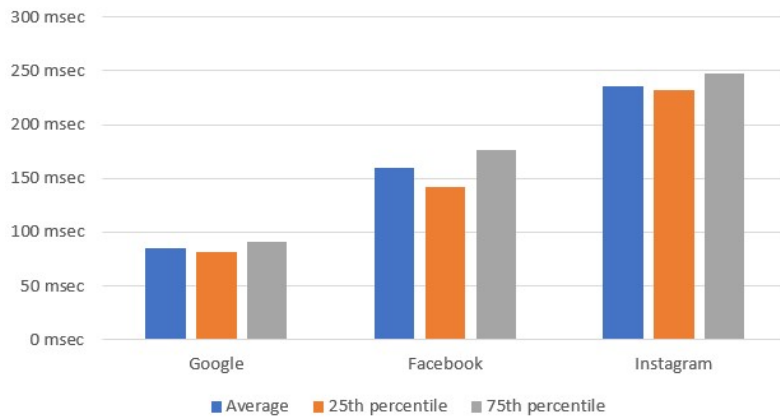
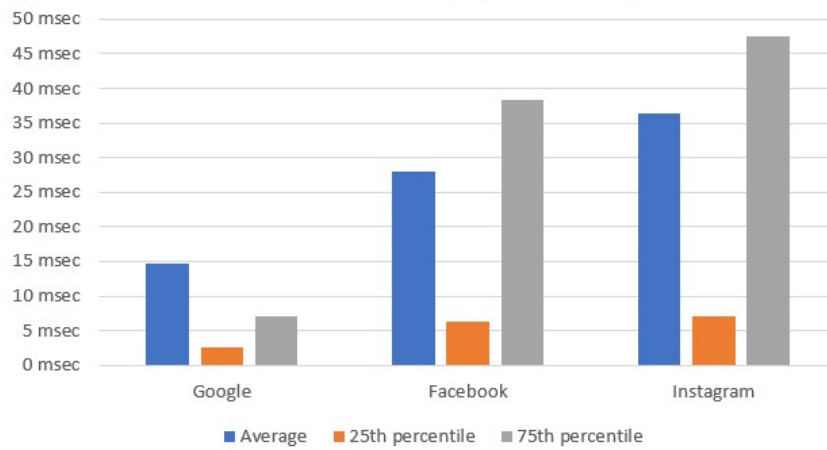


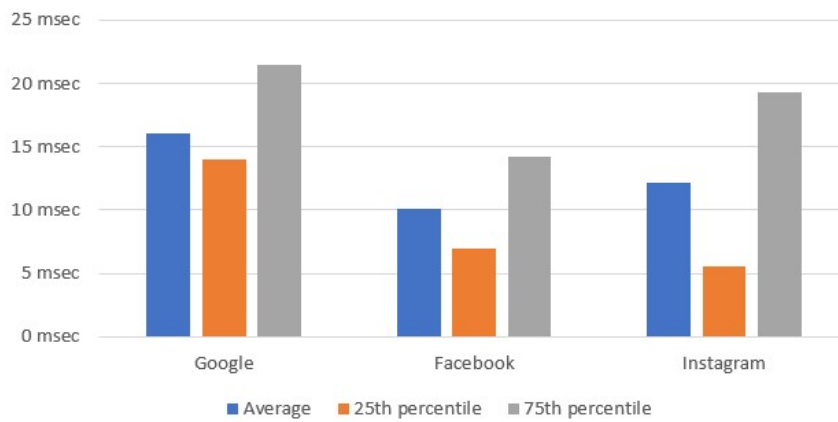
Own created DNS resolver (Experiment 1)



Local DNS server (Experiment 2)



Google DNS (Experiment 3)



## Research Paper

The results of three experiments on 3 websites from 'www.google.com', 'www.facebook.com', and 'www.instagram.com' with three different DNS resolvers indicate that the local DNS resolver is generally the fastest, followed by Google's public DNS resolver, with myDig resolver being the slowest. The primary reason for myDig's slow speed is its inefficient caching system, which requires it to make a query and wait for a response each time, resulting in longer query times. Conversely, the local DNS resolver maintains cache copies of domain IP addresses efficiently and is located close to the user, resulting in shorter response times. Although Google's public DNS resolver may be farther away from the user than the local DNS resolver, its efficient caching system enables it to provide faster response times.