

I was interviewed by a cryptography researcher for the government and a CS person who worked at Facebook and startups previously. We started by talking about my journey here, where I talked about my interest in AI and fairness.

We then transitioned to talking about my research, where they asked about my project on fairness in rideshare. From there, we segued into talking about general matching algorithms, where they asked about how to solve matching problems and the relationship between matching and linear programming. It was largely conceptual, and we discussed extensions to my research, such as other applications.

Afterwards, we discussed a math problem involving Markov Chains, They gave me a two state system (with sunny and rainy days), and asked me to calculate long-run probabilities. We discussed some things with steady states and eigenvectors.

The last thing we talked about was scheduling algorithms. We talked about requests coming in on-demand, and how to service these requests fairly. We added additional complexities (varying priorities, splitting requests into multiple parts, etc.), and we ended by talking about the leaky bucket algorithm.

At the end, I asked questions about the difference between startup life and industry, and also the future of cryptography with respect to quantum computing.

Overall, I think it went fairly well. Some of the problems took some time to think through, but luckily, most of the questions were at least somewhat related to my research. There were fewer behavioral questions than I anticipated, but the technical questions were less memorization and more thinking on the spot.