

Candidate name: Rohit Ajay Nagotkar

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Questions:

1. **Did you have a chance to review the job description?**

Ans: Yes, I went through the job description, and I believe my skills and experiences align with this role.

From the responsibilities, I see a strong focus on analyzing and improving systems, which is an area I have significant experience in. In terms of the technical skills required, I have hands-on experience with cloud platforms like AWS, and I'm proficient in tools such as SQL, Python, and React. I also have a strong foundation in data analysis and system design, which would be valuable for evaluating and verifying system implementations as part of your team.

One project from the job description that particularly caught my attention is the work MAQ Software did for a leading fintech company. In this the team worked on a scalable solution and provide self-service, near real-time analytics by using technologies like Azure Synapse, Azure Data Lake Storage, Azure Data Factory, and Azure Databricks. This project closely aligns with my experience in designing scalable cloud-native platforms, particularly in the financial sector.

I've noticed that MAQ Software primarily works with Azure, and that's something I'm eager to learn and explore further. Given my experience with AWS, particularly in serverless computing, storage, and security, I'm confident that I can quickly adapt these skills to Azure.

2. **Can you please tell me how your background qualifies you for this position?**

Ans: I have 3+ years of experience in backend development specializing in cloud technologies, automating workflows, and working with data pipelines, skills that are crucial for this role.

In my previous role as a Lead Software Developer at FinSoftAi, an early-stage startup, we worked with building a financial analytics platform to help investors make informed decisions. I was responsible for designing and implementing a scalable cloud-based system. To achieve this, I used AWS services like EC2 containers for running React web applications, AWS API Gateway to trigger Lambda functions written in Python, and an Elasticsearch database to securely process and return data within a Virtual Private Cloud (VPC). Additionally, I created technical demos to showcase the platform to potential investors, which helped improve my communication skills and ability to simplify complex technical concepts. As a result, we successfully delivered a platform that enabled real-time financial decision-making, which closely aligns with the work at MAQ Software. My hands-on experience with data pipelines and cloud services closely

aligns to the work done at MAQ Software in delivering impactful, data-driven solutions.

In addition to this, I've worked on several projects that highlight my ability to optimize and scale systems. For instance, in the DocuMentor project, I developed an intelligent PDF learning tool using GenAI, Python, and React to help students retain concepts by generating personalized FAQs and custom questions. The goal was to build a tool that would enhance user experience and improve learning efficiency. By creating this interactive tool, I was able to double the students' learning efficiency, which aligns with your focus on user-centric solutions that drive efficiency. Similarly, in the Sugarscape Simulation on TaskVine, I worked on optimizing data processing to handle large datasets more effectively. I implemented parallel execution on the Open Science Grid (OSG), reducing runtime by 30%. This optimization significantly improved data handling, which directly supports the emphasis in your role on automating workflows and scaling systems.

Additionally, my experience as a Graduate Teaching Assistant (TA) at Seattle University allowed me to help students understand complex concepts in data management, Python, SQL, and AWS. I assisted 50 students with their assignments and projects, creating an environment where they felt comfortable asking for help. This experience improved my ability to explain technical concepts clearly and effectively, a skill I know will be valuable in collaborating with your team and clients.

With my expertise in cloud technologies, data pipelines, and system optimization, I'm eager to contribute to MAQ Software's success. I am confident that my experience in building scalable systems and automating workflows will allow me to effectively tackle challenges in this role and make valuable contributions to your team.

3. What accomplishment are you most proud of? What did you do that went particularly well?

Ans: Something that I am proud of is my experience as a Teaching Assistant in "Data Management for Data Science" course. I was delighted to know that the average class grade was 92%.

Understanding data and how to retrieve relevant data from storage is important for data scientists, this is what the class aimed to achieve. I was present in the class during their sessions and helped in solving doubts. I was able to break down complex concepts into simpler, more digestible explanations for students. I made use of Teams and Outlook to enable open communication with the students so that they feel comfortable asking doubts. By focusing on individual mentoring during TA hours, I ensured that everyone who came received personalized attention.

I believe this happened due to combined efforts from me and the students. One of my highlights during this period was helping the professor with creating a lecture to setup

and run AWS Relational Database Service (RDS). We presented it live in class and helped students along the way.

Through this experience, I not only enhanced my communication and mentorship skills but also gained a deeper understanding of the importance of collaboration and teamwork in a learning environment. This experience has been a valuable part of my development, both professionally and personally.

4. **Which high school did you attend, and how do you feel your experiences there have shaped your approach to learning and problem-solving?**
Ans:

I completed my high school education in Pune, India, where I was a fast learner. I actively participated in all the events available, especially enjoying subjects like maths and chemistry, where I had regular practicals. I also received scholarships based on my marks which built my confidence.

My curiosity about how things work led me to pursue a Bachelor of Engineering in Electronics and Telecommunication. This choice introduced me to the world of coding, which made me even more interested than my regular class assignments. Eager to explore more, I started learning Python and used it in projects that challenged me to apply what I was learning in new ways. I secured an internship as a Junior Machine Learning Engineer at Omdena, a remote position that allowed me to collaborate with a cross-functional team of 34 members and the World Food Program globally.

Beyond academics, I engaged in extracurricular activities that expanded my perspective and skills. I joined the IEEE club, gaining access to valuable research papers. I also took on leadership roles, organizing the technical college fest and acting as Event Head for the Cretronix team. My interest in world politics led me to participate in and organize Model United Nations conferences, even serving as the “Director General” for the PICT MUN conference.

My experiences in high school and university improved my technical and problem-solving skills, as well as my leadership abilities. Winning awards and organizing Model United Nations conferences taught me about global awareness and how to communicate effectively. These activities helped me develop a well-rounded approach to learning and problem-solving that I use in all aspects of my life, combining technical knowledge with a practical perspective.

5. **Of the technical skills (programming languages) you have listed, which are you most comfortable with?**

Ans: I am most comfortable working with **Python, React**, and **AWS**, and my experience with these technologies' spans both my academic and professional journey.

During my undergraduate years, I began exploring Python, a language that quickly

became foundational. My journey with Python started with various projects that solidified my understanding and skill set. Python was not just a programming language; it was the gateway to solving complex problems and building efficient solutions. When I started working at FinSoftAi, I used Python along with Dash and Plotly to build an MVP that showcased our idea efficiently. After this our next assignment was to build the main product and this project significantly improved my backend development skills, especially in data handling and visualization. I built RESTful APIs to link different data sources and used AWS Lambda for scalable, serverless functions that automatically managed server needs, reducing operational costs and enhancing performance. Alongside backend development, I expanded into frontend territory using React, I developed the web user interface, employing functional components and React Hooks for efficient state and side effects management. We used Axios for backend API calls and adopted a modular development approach, which allowed us to iteratively deploy new features, thus boosting our development agility.

These experiences culminated in a series of successful projects during my graduate studies at Seattle University. For instance, I collaborated on my capstone project along with the Family Law Center at Seattle University to “Streamline Domestic Violence Protection Order (DVPO) Drafting, an intelligent LLM powered tool using Python, Flask, and React, which improved the statements given by the victims, to make them legally sound. Another major project involved using AWS EC2 and EMR to build a book search engine that handled large data volumes and optimized our cloud setup. These projects enhanced my ability to create scalable, efficient, and maintainable systems with Python, React, and AWS, deepening my practical expertise in these technologies.

My work in professional and academic settings has honed my technical skills and enhanced my ability to develop scalable, efficient, and maintainable systems with Python, React, and AWS. Each project has reinforced my proficiency with these technologies, fueling my passion for innovation and excellence in software engineering.

6. Outside of your formal classes, how do you learn a new language or technology? Have you ever done it?

Ans: Outside of my formal classes, I take a hands-on, project-based approach to learning new languages and technologies.

Even though I have a Bachelors in Electronics and Telecommunications, I was really interested in Machine Learning and Artificial Intelligence, which were very popular technologies.

I decided to start learning more about this area with a project. My first big challenge was a Real-time Emotion Recognition project using Python and Convolutional Neural Networks. This project was not just about writing code; it involved learning about computer vision and neural networks. I started this project on my own terms, and it was a tough journey.

Whenever I got stuck, I looked up information online either in the code documentation or StackOverflow, watched YouTube videos to understand better, and talked to a friend who had worked on similar projects. We would discuss my ideas and see if they made sense.

I successfully completed the project and created a proof of concept (POC) that achieved 65% testing accuracy. This project taught me a lot. It showed me how important it is to work with others and find help when you need it. I improved my skills in Python, learned how to solve tough problems, and got better at explaining my ideas to others. These are skills I still use and remember well.

7. Our position is in Redmond, WA. Is working full time in Redmond feasible for you?

Ans: Yes, I live in Seattle, and I would be ok travelling regularly.

8. Are you eligible to work for any employer in the United States?

Ans: Yes, I am on F-1 visa with STEM OPT for 3 years and will require H1-B sponsorship after that.

9. Do you have any questions for me?

Ans:

Q> I see that data migration and analytics platforms are a significant part of the projects at MAQ Software. Can you share more about what data migration tools you use?

Q> How do you support personal and professional development in your team?