

1. Tell me About yourself

My name is Omari Nyarko. I am a recent grad with a double degree in computer science and computer engineering. Over the course of my college career, I interned twice at AWS as a software engineer primarily working on backend and cloud computing technologies. I love coding because it fuels my drive to learn. Since graduation, I have been working on a system that provides AI food recommendations to local restaurants for users. I am interested in a position that very much like my current situation, affords me the opportunity to learn. I hope it does so with the added benefit of being able to work with multiple stakeholders. Hence my interest in Bloomberg.

2. Why Bloomberg?

Bloomberg has consistently been at the forefront of innovation in finance and technology. I am deeply impressed by Bloomberg's commitment to cutting-edge technologies, data-driven decision-making, and creating impactful solutions that shape the global financial markets.

Bloomberg's philanthropic spirit deeply resonates with me. Growing up in a rural village in Ghana, access to technology was limited. My public school lacked even basic computer resources. However, a Bloomberg-led initiative brought a transformative change by establishing a computer lab. This experience profoundly shaped my appreciation for technology and its potential to empower. Witnessing Bloomberg's commitment to making a positive impact on communities inspired me to pursue a career where I could contribute to similar initiatives. I believe working at Bloomberg would allow me to not only contribute to its innovative financial solutions but also align my professional goals with my passion for giving back to the community.

Bloomberg's unwavering commitment to excellence within the financial industry is undeniable. The Bloomberg Terminal stands as a testament to this dedication, providing an unparalleled platform for professionals to access real-time data, conduct in-depth analysis, and make informed decisions. I am eager to contribute to this innovative ecosystem and gain firsthand experience in utilizing the cutting-edge tools and resources that have revolutionized the financial landscape. I believe that by joining Bloomberg, I will have the opportunity to learn from the best in the industry, contribute to groundbreaking projects, and contribute to shaping the future of finance.

3. Tell me about a time when you failed in a technical setting

During my work on the Fitness Connection project, I encountered a significant challenge when integrating the AI-powered nutrition recommendation feature. The initial version of the feature provided inaccurate and inconsistent recommendations, leading to user dissatisfaction.

This failure highlighted the importance of thorough testing and rigorous validation in the development process. I carefully analyzed the issues, identified the root causes (primarily data quality and algorithm limitations), and implemented several improvements. These included

refining the data cleaning process, adjusting the AI model parameters, and incorporating user feedback to improve the accuracy and relevance of the recommendations.

This experience taught me the value of iterative development, the importance of user feedback, and the resilience to learn from setbacks and refine my approach

4. Tell me about a time you successfully implemented a project

During my time at Big Orders, I successfully implemented a web scraping algorithm to efficiently retrieve menu URLs from restaurant pages. This project aimed to streamline the process of accessing restaurant menus for our users.

Initially, retrieving menu URLs was a manual and time-consuming process, leading to user frustration and hindering the overall user experience. To address this, I developed a robust web scraping algorithm using Python. This algorithm effectively navigated restaurant websites, identified and extracted relevant menu URL links, and stored them in our database.

The successful implementation of this project resulted in a significant reduction in the time required to access menus by 40%. This improvement in efficiency directly translated to increased user satisfaction scores by 25%, as demonstrated by user surveys conducted before and after the project implementation. This data clearly highlights the positive impact of this project on the user experience.

5. Why do you want to be a software engineer at Bloomberg?

I believe I am a strong fit for this Software Engineer role due to my eagerness to learn and grow, my strong communication and collaboration skills, and my ability to make data-driven decisions.

As a highly motivated and inquisitive individual, I am constantly seeking to expand my knowledge and improve my understanding of new technologies and best practices. My experiences at Amazon, where I worked on projects such as developing a throttling mechanism for the Amazon Keyspaces Sidecar service and implementing integration tests for Apache Cassandra and Amazon Keyspaces, have instilled in me a strong work ethic and a desire to continuously learn and improve. I am a proactive learner who is not afraid to ask questions, seek guidance from experienced professionals, and actively engage in professional development opportunities.

Furthermore, my diverse experiences have honed my communication and interpersonal skills. My roles as President of the National Society of Black Engineers and Vice President of the Calvin University Student Senate required me to effectively communicate with individuals from diverse backgrounds, build consensus among stakeholders, and lead teams towards shared goals. These experiences, combined with my interactions with students as a Teaching Assistant and my collaborations with community members on the Zulip Open Source Project, have equipped me with strong communication, interpersonal, and collaboration skills. I am confident

in my ability to effectively communicate with engineers, product managers, and stakeholders at all levels, building strong relationships and fostering a collaborative environment.

I am eager to contribute my skills and enthusiasm to a challenging and rewarding role at Bloomberg. I am confident that I possess the drive, the technical aptitude, and the collaborative spirit to excel as a Software Engineer and contribute significantly to the success of the team.

7. Why are you a good fit for the role? (skillset and experience)

My academic background in Computer Science & Computer Engineering, coupled with my practical experience through internships at AWS and personal projects like the Fitness Connection web app, has solidified my passion for this field. I thrive in collaborative environments where I can contribute to impactful projects and learn from experienced professionals. I am eager to join a dynamic team where I can leverage my skills and contribute to the development of cutting-edge software solutions.

Early on in the career + attitude and curiosity to learn and believe the role will give me chance to learn. Role has allowed me improved on

Communication and collaborating in previous role and and confident that will help me become better with

6. Tell me about a project you worked on that you enjoyed alot

I thoroughly enjoyed my work on the Zulip Open Source Project. Contributing to an open-source community was incredibly rewarding. I particularly enjoyed the challenge of optimizing server response times for message delivery.

I implemented efficient caching strategies, which resulted in a 25% reduction in server response times. This not only improved the user experience but also demonstrated the positive impact of optimizing system performance. Collaborating with experienced developers from around the world and contributing to a project used by thousands of individuals was a truly fulfilling experience.

7. How do you stay updated on the latest advancements in software engineering?

I am a strong advocate for continuous learning and actively seek out opportunities to stay abreast of the latest advancements in software engineering. I regularly follow industry blogs and publications such as Medium, Towards Data Science, Hacker News and subscribe to newsletters from prominent tech companies and organizations, and actively participate in online communities like Stack Overflow and Reddit. I also leverage platforms like Coursera, edX, and

Udemy to enhance my skills through online courses and certifications. Furthermore, I actively engage in personal projects, experimenting with new technologies and exploring cutting-edge concepts. Attending industry conferences and meetups also provides valuable insights into the latest trends and best practices in the field.

8. How do you approach a challenging technical problem when you're unsure of the solution?

When faced with a challenging technical problem, I begin by thoroughly analyzing the problem statement and breaking it down into smaller, more manageable components. I then conduct thorough research, leveraging online resources, technical documentation, and consulting with colleagues or mentors when necessary. I employ a systematic approach, starting with simpler solutions and gradually increasing complexity as needed. I utilize debugging tools, code reviews, and unit tests to identify and resolve issues effectively. If I encounter a roadblock, I don't hesitate to step back, reassess my approach, and explore alternative solutions. I believe that perseverance, a willingness to learn, and a focus on iterative improvement are crucial for overcoming challenging technical hurdles.

9. How do you ensure the quality of your code?

I prioritize writing clean, maintainable, and well-documented code. I adhere to coding best practices, such as writing unit and integration tests to ensure code functionality and robustness. I utilize code review tools and actively participate in code reviews with my peers, seeking and incorporating feedback to improve code quality and identify potential issues. I also employ static analysis tools to identify and address potential code smells and vulnerabilities early in the development process. Continuous learning and a focus on code quality are integral to my development process.

10. Describe a situation where you had to identify and solve a problem independently.

During my internship at AWS, I was tasked with developing a throttling mechanism for the Amazon Keyspaces Sidecar service to ensure 100% availability across the team's distributed systems. This involved preventing the service from experiencing brownouts, where performance degrades significantly but doesn't completely fail.

Initially, identifying the root cause of these intermittent performance issues proved challenging. The problem was sporadic and difficult to reproduce consistently. To investigate, I independently analyzed system logs, monitored resource utilization, and conducted rigorous performance testing. Through meticulous observation and analysis, I discovered that certain request types were more susceptible to throttling during periods of high load.

Based on these findings, I implemented a request classification metric to identify and prioritize throttled request types. This enabled the system to intelligently retry these requests during periods of reduced service load. To validate the effectiveness of my solution, I conducted extensive regression testing and monitored system performance closely. The results demonstrated a significant improvement in service availability and a 17% increase in customer satisfaction, confirming the success of my independent problem-solving efforts. This experience underscored the importance of independent research, analytical skills, and a rigorous approach to problem-solving and solution validation in a challenging and dynamic environment.

11. Tell me about a time you had to work effectively within a team to achieve a common goal.

At Amazon, I was part of a cross-functional team tasked with improving the compatibility between Apache Cassandra and Amazon Keyspaces. Our goal was to ensure seamless data migration and consistent application behavior across both platforms.

To achieve this, I collaborated closely with software engineers, database administrators, and product managers. I spearheaded the development of a comprehensive suite of integration tests to rigorously evaluate compatibility across various scenarios. This involved; Designing test cases, developing test automation and analyzing test results.

Through close collaboration and effective communication within the team, we successfully implemented these integration tests, resulting in a 30% increase in test coverage and a 20% reduction in troubleshooting time. This not only improved the quality and reliability of our products but also empowered the development team to make faster and more informed decisions regarding feature development and compatibility considerations.

12. Walk me through your resume

Sure, I'd be happy to. My resume highlights my passion for software engineering and my experience in building high-quality, impactful solutions.

Starting with my education, I graduated from Calvin University with a Bachelor of Science in Computer Science & Computer Engineering. During my studies, I consistently achieved Dean's List recognition, reflecting my dedication to academic excellence. My coursework covered a wide range of relevant subjects, including data structures, algorithms, networking, cloud computing, and machine learning, providing a strong foundation for my career.

My practical experience began with my internships at Amazon Web Services. In my first internship, I developed a throttling mechanism for the Amazon Keyspaces Sidecar service, a critical component of the AWS infrastructure. This project required me to independently investigate performance issues, analyze system logs, and implement a solution to ensure 100% service availability. In my second internship, I focused on improving compatibility between Apache Cassandra and Amazon Keyspaces.

Beyond my internships, I actively sought opportunities to enhance my skills and contribute to the tech community. I contributed to the Zulip open-source project, implementing caching strategies that significantly improved server response times. This experience honed my problem-solving skills and deepened my understanding of distributed systems.

My personal projects further demonstrate my passion for building impactful software. I developed 'Socialize,' a social networking platform, where I focused on user experience by optimizing page load times, creating a responsive interface, and implementing real-time features. I also built 'BigOrders,' a platform that streamlines group food ordering, emphasizing user-centric design and efficient order management.

Finally, my leadership roles as President of the National Society of Black Engineers and Vice President of the Calvin University Student Senate, I believe help highlight ability to lead, collaborate, and achieve common goals. I effectively managed teams, communicated effectively, and help foster a positive and inclusive environment.

I am eager to continue learning and growing as a software engineer, and I believe my skills and experiences align well with the challenges and opportunities presented by this role as a new grad software engineer at Bloomberg.

13. Time where I disagreed with another member of the team(use Amazon experience)

During my internship at AWS, I was part of a team developing a new feature for the Amazon Keyspaces Sidecar service. We were tasked with implementing a new feature that would allow users to configure custom retry logic for failed requests.

While brainstorming solutions, I disagreed with a senior engineer on the best approach for handling a specific edge case: **requests that were consistently failing due to transient network issues**.

My colleague proposed a simple exponential backoff strategy. However, I argued that this approach might lead to excessive delays and potential resource exhaustion in scenarios with high network instability. I suggested implementing a more sophisticated retry logic, incorporating features like jitter and adaptive timeouts, which would dynamically adjust the retry intervals based on the observed failure patterns.

Ultimately, we decided to conduct a small-scale experiment to test both approaches and gather empirical data. The results confirmed my initial concerns, and we adopted a modified version of my proposed solution.

This experience reinforced the importance of open communication, respectful disagreement, and data-driven decision-making within a team. It also highlighted the value of actively listening to different perspectives and finding collaborative solutions that benefit the entire team.