



## Open Position: Software Engineer

MAQ Software delivers innovative software solutions for Fortune 500 companies. Our solutions use AI, Cognitive Services including Azure Machine Learning, the latest cloud computing trends including Microsoft Azure, Amazon Web Services, Big Data and advanced Business Intelligence features of SQL Server, Power BI, and the latest form factors such as iOS and Android.

The company has been closely aligned with Microsoft Corporation for the past twenty-two years. We are a Microsoft Gold Partner for Data Analytics, Data Platform, Cloud Platform, Application Development, Application Integration, DevOps, Project and Portfolio Management, Collaboration and Content, Datacenter, and Security. In addition, MAQ Software is a Consulting Partner for Amazon Web Services.

MAQ Software was honored for the 10th time as one of America's Fastest-Growing Private Companies by Inc. magazine. Less than 1% of Inc. 5000 companies demonstrate sustained growth by appearing nine or more times.

MAQ Software was honored with Power BI Partner of the Year award in 2021 by Microsoft. The award acknowledges outstanding successes and innovations by partners from over 100 countries and in a wide variety of categories, including partner competencies, cloud to edge technologies, entrepreneurial spirit and social impact.

As part of our fast-paced team, you will help deliver over 100 software solutions every year in an agile and fast-paced manner. As a part of the software development organization, you will get a great exposure to multiple projects using the latest technologies. The company employs over 800 people in three engineering centers located in Redmond, WA, and India (Hyderabad and Mumbai).

As a key member of a dynamic and fast-moving team, you will take part in sprint planning, product definition, and software implementation. This role provides a unique opportunity to be involved with every aspect of a software development project throughout its development life cycle. Our developers gather requirements, design code, test, engage in task management, and deliver end-to-end solutions to customers. This role includes all the technical challenges associated with ensuring project delivery on fast-paced projects.

### Engineering Culture:

We foster an intense work culture with a can-do attitude. All of our key managers come from excellent educational backgrounds and have significant experience growing a company and mentoring software engineers. Due to our smaller size, we adopt the latest technologies and computing trends ahead of the larger industry players. As a part of the company's globally distributed engineering team, our engineers gain exposure to the latest software engineering practices and fast development cycles.

Our developers routinely work on challenging technical problems that utilize the latest technologies for fast-paced software delivery.

Examples of some of our projects:

- ◆ One of the largest food and beverage companies in the world faced challenges due to unreliable data that did not give executives a real view of their customers' points of sale. This resulted from having disparate systems that generated siloed, static, and conflicting reports. In addition, reporting performance was low and dashboards were not intuitive. We addressed these challenges by migrating multiple Business Intelligence platforms into Power BI, which reduced critical decision-making from weeks to days, brought savings in licensing and infrastructure, and led to skyrocketing Power BI adoption. This was accomplished through a well-crafted plan that included a Power BI migration and optimization, process automation through Power Automate, and a pilot to integrate Azure Synapse to infuse AI-driven insights into inventory, delivery routes, and sales forecasts. A key contributor to user adoption was our approach to implement Centers of Excellence to train hundreds of team members around the world in Power BI capabilities, governance, and best practices.
- ◆ We worked on a Machine Learning solution for retail stores and helped them to increase their sales. We have worked with our client to gather their sales data, promotion, and discount data for model engineering. We also used weather data from the US government to develop historical weather model. Our team created a hybrid ML model that predicts future sales far more accurately than the existing ML model used by customer. We used Fourier transforms to decompose sales, analyze trends, and remove noise from the sales time series. Then we applied logarithmic, exponential, and S-curve transformations to features which helped us to develop hybrid regression models and predict upcoming future sales. Our Sales Forecasting Engine, built on Microsoft Azure Databricks, allowed our client to align their business objectives with predicted sales.
- ◆ For another client, we developed a Business Intelligence solution to pull high volume data (more than 150 million rows) from source tables to a staging environment efficiently. We developed visually rich reports that allow business users to analyze the data from a different perspective and do what-if analysis based on business needs. We developed data orchestration pipelines to pull a high volume of data in 30 minutes and developed reports using Power BI with optimal page performance.

### **Job Responsibilities:**

#### **Gather Software requirements and Data Analytics (~15%)**

- Elicit requirements from customer
- Review User Stories and create software development tasks
- Participate in daily project team huddles and attend daily calls with the onsite team and customer to understand business needs
- Work closely with business intelligence and analytics developers to understand, analyze, make solution recommendations, and define alternate strategy for data design, data orchestration, and ensure data consistency and accuracy

#### **Develop architecture design (~10%)**

- Develop iterative prototypes and analyze various upstream data sources
- Prepare approach document based on the business needs
- Identify design alternatives and conduct technical feasibility
- Develop proof of concepts for technical evaluation and early customer feedback

- Develop database schema and document other architectural dependencies for a reliable, scalable, and optimal solution
- Develop algorithms to convert functional specifications into software design
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#### **Application development using Azure SQL, Azure services, Power BI, Machine Learning, SharePoint Online, Power Apps, and C# (~65%)**

- Develop, maintain, and enhance ADF pipelines, Azure Analysis Services, Azure Databricks, and various forms of BI content including reports, dashboards, and analytical models
- Develop and maintain the machine learning models using Python
- Develop various rich content report using Power BI
- Write frontend and backend code as per the approach document
- Unit test the solution
- Develop, maintain, and enhance web applications using latest frameworks and libraries
- Analyze the reports generated by the tools and incorporate the changes/ results
- Conduct peer code reviews and external code reviews using Git and Azure DevOps
- Generate and deploy daily builds for verification and customer review
- Ensure the consistency between the defined requirements, the implementation of the business logic at the database layer, and the user's experience in interacting with that data
- Debug, monitor, and troubleshoot solutions
- Verification Automation framework development using Selenium and other tools
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#### **Training and certifications (~10%)**

- Participate in technical study groups and internal trainings
- Complete in-house certifications to improve the skills on different technologies
- Complete MOOC courses from Microsoft Learn
- Complete MOOC courses from Coursera, edX, Udemy, and Pluralsight, as needed
- Complete Microsoft certifications on Data Analyst Associate, Azure Developer Associate, Azure Data Engineer Associate, Azure AI Engineer Associate, and Azure Data Scientist Associate as needed

#### **Candidate Profile**

##### **Eligible Branches:**

- B. Tech./B.E. (CSE/ IT)
- M. Tech./M.E. (CSE/IT)
- BCA + MCA/ B.Sc. (IT) + MCA/ B.Sc. (CS) + MCA

##### **Eligibility criteria:**

- 60% plus or equivalent in Computer Science/Information Technology
- 60% plus in 10th and 12th
- No active backlogs

#### **Why consider MAQ Software?**

- Work on complex projects for Microsoft Corporation and other US companies on the latest software platform (Azure DevOps, Azure SQL, Azure Synapse Analytics, Data Factory, Azure Databricks, Azure Data Lake Storage, SharePoint Online, AI, Power BI, Power Platform, Dynamics 365, and HTML5/ CSS3, etc.)
- Deliver 4 - 6 projects in a typical year to gain great experience and develop a strong resume

- Follow latest software engineering techniques including Agile and Lean development techniques which empowers you to contribute to your fullest potential
- **Highly rated training program** – Our intense training program prepares you to start making active contributions in live projects within two months of joining the company
- Six months' service agreement among the lowest in the industry to ensure that you have sufficient time to evaluate our work and the company

**How to prepare for the interview and technical assessment:**

- The interviewer is looking for evidence of your problem-solving skills, technical expertise, and passion for the latest technologies. In the brief interaction, consider sharing your GitHub profile and code you may have written. You can also specify your achievements on coding platforms like HackerRank, Topcoder, CodeChef, etc.
- Review the basics on Database course, Data Structures and Algorithms, and Machine Learning related courses. You can complete Coursera and edX courses to brush up your knowledge.
- Review two books by Rajeev Agarwal to understand work culture and expectations from employers. These books may be available in your library.