Boston, MA

Shu Shang

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I am a full stack developer with 5+ years' experience, passionate about building scalable, reliable, and high-performance software using C#, JavaScript, TypeScript, Python, SQL and other technologies. Possess a strong knowledge base in cloud management, system design, database design, debugging and data analysis.

Work Experience

Senior Software Engineer   **Charles River Associates**   **May 2022 - Present**
Auction and competitive bidding   Boston, MA
- Developed custom functionalities for a multi-tenant bidding application used in global trading events, leveraging RESTful API, .Net 8, Redis cache and Rabbit MQ.
- Designed and implemented an auction management system for global wool trading, supporting multi-seller and multi-buyer auctions with different currency options.
- Designed and implemented an automated workflow to enhance pre-event, live-event and post-event processes, reducing manual operation work by 90%. Utilized C#, Python, Azure Blob Storage and Windows scheduler.
- Designed and implemented ETL data pipeline using Python and SQL and created Power BI reports for data analysis and visualization. Presented the solution to the VP and engineering team, received positive feedback.
- Participated in client meetings to gather business requirements, prepared demos and dry-run auctions based on client needs and managed tasks and documents using JIRA.
- Developed unit and automated test scripts to enhance code coverage. Set up deployment processes for multiple environments.

Software Engineer   **United Biosource**   **Sep 2020 – May 2022**
                          Blue Bell, PA
- Implemented Learning Management System (LMS) and several Patient Enrollment projects for full cycle development (.Net Core, Node.js, Angular, C#, TypeScript).
- Implemented Angular libraries to share components and services across different projects.
- Created RESTful APIs using Azure functions and stored data in Azure Cosmos DB and Azure storage.
- Deployed Azure Functions and setup API management for various test environments.
- Integrated user authorization and authentication with Auth0 APIs.
- Designed database schemas for web applications using MS SQL server and utilized Entity Framework for database migration and updates.

Database Developer   **CCS Global Tech**   **May 2019 – Aug 2020**
                          Wayne, PA
- Implemented SQL queries, user-defined functions, views and stored procedures to analyze data and created reports using Power BI and SSRS (SQL Server Reporting Service).
- Optimized slow queries to reduce report load time.
- Performed data analysis using Python and SQL.
- Designed and developed several dashboards for business decision making.

Technologies and Languages
- Languages: C#, Python, SQL, JavaScript, TypeScript, HTML, CSS

- Framework: .NET, .NET Core, Entity Framework, Angular, React, Node.js
- Developer Tools: Git, Shell, Bash, Visual Studio, SSMS, Azure DevOps, JIRA
- Database: MongoDB, Azure Cosmos DB, Azure SQL DB
- BI tools: Power BI, Tableau

Education and Certifications

- **M.Sc. Computer Science,** Harrisburg University of Science and Technology.   **2022 – 2024**
- **M.Sc. Civil and Environmental Engineering,** Carnegie Mellon University.   **2017 – 2019**
- **B.Sc. Environmental Engineering and Science,** Wuhan University of Technology, China.   **2013 – 2017**

- **Microsoft Azure Fundamentals**   **Dec 2022**
- **Exam 778: Analyzing and Visualizing Data with Power BI**   **Aug 2019**