

MD SHAKIL AHAMED

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Employment

Washington State Labor & Industry, Lead Developer, Olympia, WA (Oct 2020 to Present)

- Implemented in-memory caching in asbestos notification API services, which improved response time by 60%.
- Integrated microservices in QuickCards to decouple and isolate the apps and improve efficiency
- Migrated Secured File Transfer to managed file transfer in automated jobs and services to integrate with Washington state adopted robust, secured services, e.g., 80k File transfer rate/hour with 200GB file size, all connections encrypted.
- Added features in PSI exam services to enhance records security by eliminating the need for citizen personal information during file transfer. Enabled 10% of application rules and features, optimized database queries, and improved database design in High Hazard Facility internal, external, and public projects.
- Actively worked on Teak Cloud migration services, moving state servers to the cloud, conducting end-to-end testing, deploying different services and applications in different environments, SQL server migration, and cloud adoption.
- Added 60% value in API services and web application front-end development, including React, Vue, Angular, and JavaScript development, with 40% of time creating software architecture documents, database design, letter service design, various types of printer architecture design, and template designs.
- Took 40% responsibility in application deployment end-to-end, troubleshooting, and participation in front-end and back-end community practices. Fixed 80% browser compatibility in 50 projects. Added ADA compliance and web accessibility in 20 websites in the Delta team.
- Acted as scrum master 10% of the time in purely agile teams and ceremonies, and 30% of the time was allocated for code review and code quality improvement, participated 50% of the time for customer bug fixes and improvement, 20% of the time for user manual, installation documents, security documents, architecture documents, database design documents creation, and 20% in end-to-end testing.
- Improved automation time by 50% by integrating IBM MQ messaging services for audit and information transfer services across different teams and agencies. Added 5% features in Infraction citation apps, 10% in self-insurance apps, 20% in QuickCards licensing apps, and 10% in reporting apps utilizing SQL reporting services.
- Additional modules worked on included log monitoring, .NET conversion, compliance setup, continuous education, licensing, reporting, search, course management, and setup of payment methods.

HCL America, Lead Developer, Redmond, Washington (Feb 2020 to Sep 2020)

- Designed a 100% proof of concept for the collaboration center project. Implemented multi-data source services and enabled GraphQL API services using clean architecture.
- Developed user persona, preferences, user features, D3 chart with API services, integrated Azure services Bus, Azure Data Lake, and one security framework integration using React and Typescript tools.
- Spent 60% of the time on development and 40% on architecture design, including internal team collaboration, collecting user requirements for apps, and documentation design.
- Designed SQL and NoSQL database design with business models, integrated Azure AD-based Data Lake (Big data) view with cache service on the server side, and analyzed the feasibility of accessing Azure Hadoop data access using PySpark.

Digital Intelligence Systems, Senior Web Developer, Florida (Aug 2019 to Jan 2020)

- Added Azure AD authentication with cookie MFA from Form authentication and integrated Windows authentication. ^
Designed clinical testing API, Address validation API, and Master Lookup data API

- Designed database model objects and implementation (tables, views, indexes, procedures, triggers). Estimated user-defined requirements and DevOps requirements for Syringe Exchange Program (SEP) Web.
- Consuming API services using React component, leveraging Context, Functional Component, resolving using promises and D3 chart and custom CSS chart and components label testing using JEST.
- Developed ADA (The Americans with Disabilities Act) compliant web application. Designed Login Bypass for admin users in Azure AD using OpenID connect.
- Developed ELO (Electronic Lab order) using REST Web API service. Developed a web application's Bar code reading module and a security audit history logging module. Developed address validation services using WCF service.
- Participated in backlog grooming, sprint planning, retrospective and review meetings, and code review. Designed, developed, and coded business requirements.

Florida State Revenue, Software Engineer, Florida (Nov 2018 to Aug 2019)

- Designed 60% of the database, migrated 100% of the data from Oracle to SQL, and performed 80% of the end-to-end testing for the existing application in order to design new applications for Florida Carline and Railroad tax applications.
- Developed object-oriented designs for user login sessions, application configuration, timeout time, module setup, model-view-controller setup, allowed social media accounts, validations, business requirements implementations for each screen, prototype design, testing modules, managed access using active directory and security protocol implementation, roles, authentication, and authorization integration, Azure AD feasibility analysis, model log modules, and integrated SQL reporting services and custom data sources to the reports.
- Created SQL Server Integration Services packages and reports using SQL Server Reporting Service. I also worked with business customers to identify and document system requirements and developed system technical documents.
- Improved the System Maintenance Technical Document by listing the functional and technical details. I was also involved in the complete SDLC, which includes requirement analysis, development, system, and integration testing. I developed the UI layout and front-end programming (HTML) for web application compliance pages.

Trak Engineering, Software Engineer, Florida (Jan 2015 to Dec 2017)

- Saved a \$1 million contract by resolving data transfer issues for one client.
- Worked on five projects, including Embedded systems for dispensers, Car data extract apps, Remote polling service apps, Tank monitor services, Windows service, and IP Services.
- Added IP polling async services, which increased transfer speed by 70% from serial polling for the client sentry data upload. Managed daily full-stack web application development activities for critical enterprise system applications, including Dispenser Automation system, Remote Polling service, and Fuel Trak Web apps.
- Implemented polling services to fetch external hardware data and designed the database schema and UML diagrams. Prepared technical design documents, including feasibility analysis and database schema.
- Created user interfaces for embedded applications, handled application upgrades, and facilitated remote transactions. Provided technical support to the QA team and clients.

Florida International University, Research Assistant, Florida (Aug 2012 to Dec 2014)

- Obtained National Science Foundation (NSF) Grant Research project on American Sign Language & 3D Avatar, Empathic Agent applications with IDRT institute.
- Implemented Empathic 3D virtual character for Sign Language animation (ASL) app. Designed algorithm for motion generation in 3D characters for the Institute for Disabilities Research Inc., using MS Kinect, Electronic Gloves, and Autodesk Maya. Developed API for gesture and facial animation in 3D characters.

- Imaging-Based Blood Cell Counter. Count WBC and RBC from the pathology image. Results: 60% counting accuracy from the image. Nachos Operating System Implementation.
- Implemented Concurrent Programming, Mutexes and Condition Variables, Mutexes, Semaphores and multiprogramming.
- Diabetes prediction using Machine Learning. Used the Pima Indian Diabetes dataset of about 1000 patients to train the model and created a web interface to generate diabetes prediction with 90% accuracy to detect the objects.
- Java Instrumentation apps. Use Byte Code Engineering Library to analyze, create, and modify (binary) Java class files.

ASIT, Software Engineer Dhaka (Aug 2009 to Aug 2012)

- Added features on Human Resource Management Suites and Banking Suites.
- Improved SQL scripts for the HRM, CRM, and E-Commerce software apps.
- Update ADA compliance on the pages. Added web services and fixed SQL bugs.
- Implemented UI and API services using JS, REST, API Services, and SQL Databases.

Education

Florida International University, MS in Computer Science, Florida, USA (Aug 2012 to Dec 2014)

Chittagong University of Engineering & Tech, BS in Computer Science, Chittagong, BD (Mar 2005 to Aug 2009)

Training, Certificates & Enrollment

- Completed 20+ credits courses in **MBA** in IT program (**Ottawa University, Kansas**)
- 50+ courses completed, including Programming, DevOps, Cloud (**Pluralsight & Udemy**)
- Certificate: Project Management Professional, PMP (**PMI Institute**)
- Certification: IBM Machine Learning with Python (**Coursera**)
- Certification: PMP Exam Prep Professional Certificate (**Udemy**)
- Certification: Oracle Certified Java Professional, Java SE 6 Programmer (**Oracle**)
- Certification: Accomplished CCNA CISCO Network Associate (**Cisco**)
- DevOps: MS Azure Developing Solution & DevOps Training (**Florida Health**)
- Award: High-Performance award for Property Tax portal applications development (**Florida Revenue**)
- Obtained 99th Percentile Marks in 2004 in the Higher Secondary Examination in Bangladesh among 1 Million students

Expertise In Language & Technologies

- **Programming Languages:** Python, Java, C#, JavaScript, C/C++, SQL, Shell Scripts, Typescript
- **Libraries/Frameworks:** React, Vue, Angular, .NET Core, REST, Mock, Redis, Django, Spring, Vue, Flask, .NET, Apache Spark, MVC, Hadoop, REST, React, WordPress, Weka, Flink, Kafka, ActiveMQ
- **Tools / Platforms:** Visual Studio, VS Code, DevOps, AWS, Microservices, Domain-Driven, Serverless, CQRS, SOA Cloud: Azure, AWS, IBM Cloud, Jenkins, Azure DevOps, Terraform, Jenkins, Docker
- **Databases:** NoSQL, SQL Server, Oracle PL SQL, Cassandra