# MD MAHMUDUL HASSAN

Fairfield, IA 52556 • 641.233.9075 • <u>lalinmail@gmail.com</u>
<a href="mailto:https://www.linkedin.com/in/mhlalin">https://www.linkedin.com/in/mhlalin</a>
<a href="mailto:https://github.com/mhassan-git">https://github.com/mhassan-git</a>
<a href="mailto:https://mohammad-hassan.site">https://mohammad-hassan.site</a>

### **FULL STACK C#.NET DEVELOPER**

With nearly ten years of work experience, I am an enthusiastic engineer who takes initiative and has strong problem-solving and analytical skills. I am looking for a dynamic workplace where I can pursue my passion for innovation, education, and ownership. Possessing a great understanding of C#, ASP.NET MVC, ASP.NET Core Web API, Java, JavaScript, Microservices, TypeScript, Angular, React, MS SQL, MySQL, DynamoDB, major steps of SDLC, and the ability to analyze, debug, and optimize code.

Software Development Life Cycle ● Backend / Frontend ● Design Patterns ● Microservices ● Analysis ● Debugging
 Testing ● Code Optimization ● Team Leadership.

Languages: C#, Java

Web: HTML5, CSS3, Bootstrap, jQuery, JavaScript, TypeScript, NodeJS

Web Services: REST

Web/App Servers: IIS, Apache Tomcat

Cloud: AWS, Azure DevOps

Frameworks: ASP.NET MVC, ASP.NET Core Web API, ASP.NET Identity Server 4, Entity Framework, Angular, React,

Spring, Spring boot, Hibernate

Databases: MS SQL Server, MySQL, DynamoDB, SQL Lite

Design Patterns: Singleton, Command, Strategy, Observer, State, Builder, Factory, Adapter, MVC, etc.

SDLC: Agile/SCRUM, Waterfall, TDD

Tools: GitHub, Visual Studio, Visual Studio Code, Maven, MySQL Workbench, NPM, UML, IntelliJ IDEA, Jira, Trello,

Postman, mabl, Docker, Swagger, Kafka, RabbitMQ, AWS SDK for .NET, NUnit.

#### PROFESSIONAL EXPERIENCE

**CAREER NOTE:** Completed on-campus studies and currently taking distance education courses to complete a **master's degree in computer science** (Available for full-time, W-2 employment).

#### KAZ SOFTWARE, Dhaka, Bangladesh • 03/2021 - 01/2023

Award-winning custom software development company that helps enterprises and startups design, build, and launch innovative products.

#### Sr. Software Engineer

Team Lead, Design and develop video and audio calling-based applications from a legacy Java application.

- Analyzed, designed, and developed a project framework from a legacy Java monolith application into an ASP.NET
  application using microservices architecture by implementing AWS Serverless architecture. It optimized the application
  by 30% and reduced the server cost by 25%.
- Updated, modified, and expanded existing web applications using C#, ASP.NET MVC, and Azure DevOps
- Designed and developed a front-end application using React, Angular 9+, typescript, jQuery, JavaScript and Bootstrap.
- Planned sprints and conducted day-to-day scrum meetings as a scrum master.
- Contributed to all phases of the development lifecycle.
- Updated, modified, and expanded existing web applications using C# and ASP.NET Core.
- Provide production support such as On-demand bug fixing, Feature update, Server health check and Deployment.
- Motivated team members and created an inspiring team environment with an open communication culture.

<u>Technologies Used:</u> ASP.NET Core, C#, Java, Clean Architecture, Microservices, Dependency Injection, ASP.NET Web API,LINQ, SignalR, JSON, NInject, XML, MySQL ASP.NET MVC, React, React Router, Redux, Axios, Angular 9+, Amazon web Services such as AWS serverless Application, API gateway (Rest API, WebSocket API), EC2, Code Commit, CodePipeline, S3, Cognito, SQS, SNS, Step Functions, RDS, Aurora, DynamoDB, CloudFront, Lambda, IAM, AWS SDK for .NET, OAuth 2.0, Entity Framework Core, ASP.NET Identity Server 4, Azure DevOps(CI/CD), TFS, Git, Jira, Trello, Postman, Swagger, mabl, Docker, NUnit.

### MISAMI-BITOPI GROUP, Dhaka, Bangladesh • 09/2016 - 02/2021

A reputed RMG (ready-made garment) company in Bangladesh.

#### Sr. Software Engineer

Designed and developed module of existing ERP application.

- Enhanced, and modified existing enterprise level web and desktop-based applications using C#, ASP.NET Core, and ASP.NET MVC.
- Designed and developed an application that takes an input word or pdf file and parses the data into the system. It reduced 90% of the time the user spent inputting data.
- Designed and developed thread consumption applications that helped users calculate and maintain a history of thread consumption. It improved the efficiency of the user by 80%.
- Designed and developed frontend applications using React, Angular 2+, TypeScript, jQuery, and JavaScript.
- Confirmed program operation by conducting tests, modifying program sequences, and/or codes.
- Wrote stored procedures, user define functions, views, triggers, and complex SQL Queries in SQL Server.

Technologies Used: ASP.NET Core, ASP.NET MVC 4.0, ASP.NET Web API, Entity Framework, LINQ, Autofac, ADO.NET, C#, MS SQL Server, SSIS, RDLC, HTML5, CSS, Angular 2+, React, jQuery, Ajax, JavaScript, TFS, Git, Kendo UI, Highcharts JS, AWS such as EC2, S3, RDS, DynamoDB, Android.

### GLOBAL SOFTWARE ARCHITECTS, Dhaka, Bangladesh • 05/2013 - 08/2016

A US based custom-made software company in Bangladesh.

# **Software Engineer**

Developed new features, modified existing features, tested and fixed bugs according to client need.

- Wrote server-side code using ASP.NET MVC and ASP.NET Web Forms.
- Wrote store procedures and triggers using MS SQL Server.
- Worked intensely on the front-end using jQuery, bootstrap, and the Google Maps API.
- Developed and maintained mobile applications using Xamarin for Android and iOS.

Technologies Used: C#, ASP.NET MVC 3.5, ASP.NET Web Forms, ASP.NET Web API, SignalR, MS SQL Server, SSRS, HTML, CSS, JavaScript, bootstrap, jQuery, Ajax, Backbone JS, Google MAP API, Xamarin android/iOS, JSON, XML.

### **ACADEMIC PROJECTS**

Maharishi International University (2023), Customized Framework Project: Developed its own spring framework that supports convention over configuration. I created a custom annotation and used reflection so that dependencies could be injected at runtime. Used design patterns to maintain DRY, KISS, and YAGNI, such as COR, proxy, and factory patterns.

Maharishi International University (2023), Blog Application: The application is composed of three microservices, such as user, post, and comment. We implemented JWT authorization inside the API gateway and used Eureka for discovery services. Utilized Java, Spring Boot, Hibernate, Eureka, MySQL, Microservices, and JWT Authorization.

Maharishi International University (2023), Dictionary Application: Individual project where a web-based dictionary application is implemented. Utilized HTML, CSS, Node.js, and MySQL.

## PERSONAL PROJECTS

Recipe (2023): Created an Angular application for users to create recipes and added ingredients to the cart.

<u>Technologies Used:</u> Angular, TypeScript, Firebase.

### **EDUCATION**

#### Master's in computer science

(In progress via distance education; expected completion 10/2025) Maharishi International University, Fairfield, Iowa

Key Courses: Modern Programming Practice, Algorithm, Web Application Programming, Enterprise Architecture, Advance Software Development, Cloud Computing

> Master's in computer science (Completed in 01/2020) Jahangirnagar University, Savar, Dhaka, Bangladesh

Master's in chemistry (Completed in 02/2008)

Shahjalal University of Science and Technology, Sylhet

Bachelor of science in chemistry (Completed in 02/2007) Shahjalal University of Science and Technology, Sylhet