

Madhuri Bandari

FULL STACK .NET Developer

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OBJECTIVE

Highly motivated Computer Science graduate with 2 years of experience in .NET development, backend engineering, and software architecture. Passionate about building scalable, high-performance applications using C#, ASP.NET Core, and modern web technologies. Experienced in database management, API development, and cloud-based solutions. Seeking opportunities to apply my expertise in .NET development and software engineering to drive innovation and efficiency in enterprise applications.

TECHNICAL SKILLS

- **Programming Languages:** C, C++, C#, Advanced C#, Java, Python, SQL, Perl
- **.NET & Backend Development:** ASP.NET Core, Entity Framework Core, REST APIs, Microservices, Web API Development
- **Database Management:** SQL Server, MySQL, PostgreSQL, Entity Framework Core
- **Software Development:** Full-stack development, API Integration, Performance Optimization, Object-Oriented Programming (OOP), Design Patterns
- **Cloud & DevOps:** Azure, AWS, Docker, Git, CI/CD Pipelines
- **Web Technologies:** HTML, CSS, JavaScript, React.js, Blazor
- **Testing & Debugging:** Unit Testing, Integration Testing, .NET Debugging, Postman
- **Tools & Technologies:** Visual Studio, GitHub, JIRA, MATLAB, Jupyter Notebook
- **Operating Systems:** Windows, Linux

PROFESSIONAL EXPERIENCE:

System Engineer, Infosys, Mysore

System Engineer, INS-ADM - Allstate Corporation, Mysore, Karnataka, India June 2021 – Aug 2023

- In my role as a **System Engineer at Infosys for The Allstate Corporation**, I developed backend applications, led teams, and collaborated with international USA clients, gaining valuable insights into the insurance industry. I also learned **Perl** to solve complex problems and demonstrated strong **time management** and **problem-solving skills**.
- I developed the backend application code and performed analysis for the OnlineFoodOrder Application, my capstone project. I managed the team, wrote the Entity Framework code, and used Postman to test the outcome throughout the project. offered advice pertaining to technical matters and assisted my colleagues and I in finishing the assignment successfully.
- Served as a System Engineer for Infosys at The Allstate Corporation. As a new employee, I learned about the insurance industry and had the chance to work with international clients. Participated in KT sessions with the AWD (Automatic collaborate Distributor) team and was given the chance to collaborate with the TRANSCEND and Image Migration teams.
- **TRANSCEND team:** I worked on a variety of projects and problem tickets. My roles and responsibilities included interacting with clients, creating designs and implementation plans, obtaining approvals, and presenting the various projects, which showcased my strong presentation skills.
- For the problem tickets, I had to come up with a solution to a problem that a bank was facing using a new language—Perl. Learning the new language from the ground up; this demonstrates my ability to pick things up quickly. Being able to finish the code in the allotted time demonstrates time management.
- Developed and implemented a **Perl-based solution** to identify **mismatch dates** in files, leveraging online research and team collaboration. Secured design approvals and successfully executed the solution in the development environment before migrating it to production.

- Led **password reset operations** across **Windows, Linux, and Oracle IDs**, ensuring compliance with security protocols. Managed design documentation, scheduling, approvals, and execution, delivering successful releases with thorough validation.
- Updated **SQL queries** related to **FUND_NAME_CHANGES** as part of an **off-cycle release**, ensuring accuracy in test, regression, and production environments. Managed end-to-end implementation, from design preparation to securing approvals and coordinating with release teams.
- Coordinated **Change Management Processes**, including creating **RITMs and Change Orders**, assigning CTASKs to required teams, and overseeing release execution while ensuring validation and compliance.
- Scheduled and conducted **implementation planning meetings**, secured approvals from multiple stakeholders (design, testing, peer review, managerial), and ensured seamless deployment in production environments. Designed, developed, and maintained backend applications using .NET Core and ASP.NET Core.
- Built and optimized REST APIs while ensuring security best practices. Developed robust database solutions using SQL Server, MySQL, PostgreSQL, and Entity Framework Core. Applied object-oriented programming (OOP) principles and design patterns to enhance software quality.
- Engaged in collaborative feature development with cross-functional teams, ensuring customer-centric solutions. I wrote and maintained automated integration tests to improve code reliability.
- Optimized application performance using multi-threading, parallel processing, and asynchronous programming.
- Reviewed and improved code quality through structured code reviews, providing constructive feedback.
- Provided effort estimations and adhered to timelines for project deliverables.
- Worked with the TRANSCEND team, handling complex problem tickets, client interactions, and implementation plans.
- Developed Perl-based solutions for automated data validation and processing tasks.
- Managed password resets across multiple environments (Windows, Linux, Oracle) with security compliance.
- Led Change Management processes, ensuring seamless software release cycles.
- Translate business requirements and technical specifications into robust, maintainable solutions.
- Develop and maintain web applications and desktop software using .NET technologies.
- Work with cross-functional teams to deliver features that align with customer expectations.
- Collaborate and engage in open communication with team members for comprehensive feature delivery.
- Implement and optimize REST APIs for scalable backend architectures.
- Ensure application security by adhering to secure software development principles and addressing vulnerabilities.
- Participate in end-to-end system debugging and issue resolution.
- Write automated integration tests to ensure software reliability.
- Optimize performance using advanced multi-threading, parallel processing, and asynchronous programming techniques.
- Actively participate in code reviews, providing and responding to feedback.
- Estimate project timelines and ensure timely delivery of development milestones.

TECHNICAL PROJECTS

1. **A hybrid framework for short-term wind speed forecasting based on EEMD & LSTM network.**
Spring 2021: Designed a new model named LSTM network to forecast accurate wind speed values using Neural Network tool in MATLAB. Evaluated different neural network models, i.e., latest, and traditional models to predict wind speed values accurately. Four people worked together to complete this project. As the group leader, it is my duty to oversee all responsibilities, including presentation, MATLAB neural network development, documentation, and delegating tasks to team members to effectively finish the project.

2. **Breast Cancer Dataset Analysis:** Implemented **linear regression from scratch**, exploring **gradient descent**, **stepwise regression**, and the application of **regularization and feature scaling** for predictive modeling.
3. **Capstone Project – OnlineFoodOrder Application:** Developed backend application code, managed the team, and wrote **Entity Framework Core** code. Utilized **Postman** for testing and ensured successful project completion.
4. In addition to my technical expertise, I have hands-on experience with **neural networks**, having worked on **Forward Propagation**, **Back Propagation**, and **Elman Propagation** algorithms.
5. I have also contributed to various projects in **Algorithms Design and Analysis (ADA)**, including Implementing the **Gale-Shapley Algorithm** for **stable matching** and stability checking using Python 3. Developing a **greedy algorithm** for **job scheduling** on two machines to maximize the total number of non-overlapping jobs. Solving the **Interleaving Strings Problem**, ensuring the preservation of substring order while maintaining an acceptable difference in the number of substrings.

INVOLVEMENT

- **Campus Energy Monitoring System (CEMS)** Fall 2020
I participated in a one-day IIT Hyderabad workshop. and took part in demonstrating the organization's raspberry pi-based campus energy monitoring system. For the five-person crew, I oversee installing and maintaining all wiring, switches, and other electrical equipment.
- Participated in “Smart India Campus Hackathon” conducted by IIC in KITS, Warangal. Fall 2020
- Achieved “3rd Prize” for PPT Presentation at NIT, Warangal during Technozion Fall 2018 & 2019
- Achieved “1st Prize” for PPT Presentation at KITS, Warangal during Sumshodini Fall 2018 & 2019
- Achieved “1st Prize” for Poster Presentation at KITS Warangal during Sumshodini Fall 2018 & 2019
- Certified merit certificate for “Mobile Making” in Workshop. Fall 2018
- Awarded “Sri Raghuvver Gyani Memorial Cultural Prize” for Overall Academic Excellence Fall 2022

CERTIFICATION

- Advanced CSharp Programming
- Basic CSharp Programming
- Developing Services using ASP.NET Core Web API
- Dot Net Debugging
- Entity Framework Core
- Implementing databases using Microsoft SQL Server
- Securing the Backend Layers

EDUCATION

Master of Science in Computer Science

Wright State University, Dayton, OH

GPA: 3.85/4

Bachelor of Technology in Electrical & Electronics Engineering

Kakatiya University, Warangal, Telangana, India.

CGPA: 9.33/10

State Board of Technical Education and Training

VMR Polytechnic, Rampur, Warangal, Telangana, India

Percentage: 92.80/100

Board of Secondary Education

Vidya Niketan High School, Hanamkonda, Telangana, India

CGPA: 9.7/10