

# Mahmuda Akter

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**Front-End Developer | Full Stack Developer | Web Developer | Software Engineer | Front-End Engineer**

Detail-oriented and innovative **Bachelor of Science in Computer Science** graduate and incoming **graduate student** at the **University of Texas at Austin**, starting in Spring 2025. **President's Scholar** and **Dean's Scholar** with a solid foundation in front-end and full-stack development, proficiency in **Java**, **C++**, **JavaScript**, **React**, and **full-stack** web technologies. Demonstrated expertise in developing scalable, efficient software solutions; adept in utilizing development tools and methodologies. Technical skills include programming, **database management**, cloud technologies (AWS), and a commitment to **continuous learning** and excellence in code quality. Actively seeking a summer 2025 internship in software development or engineering, bringing strong application design and development expertise.

## SKILLS | Software Development | Full Stack Development

- **Programming Languages:** Java, C++, C, JavaScript, Node.js, HTML/CSS/JSP, Swift, Python
- **Libraries/Frameworks:** React, Jenkins
- **Data/Databases:** SQL, NoSQL, MySQL, MongoDB
- **Cloud/Technologies:** Amazon Web Services (AWS), Docker, Kali Linux, Git (Version control)
- **Methodologies:** Agile Scrum, Continuous Integration/Continuous Deployment (CI/CD)
- **Professional, Business, Leadership Skills:** Teamwork, Communication, Collaboration Skills, User Focused, Attention to Detail, Highly Motivated, Self-driven, Organizational Skills, Prioritization, Analytical, Flexibility, Resiliency, Troubleshooting, Agile, Accountability, Reliability, Creativity, Problem-Solving, Innovation

## PROJECT EXPERIENCE | Software Developer | Full Stack Developer

**Family Leave / Parental Leave** | September 2022 - December 2023

- Emphasized personal development and technical upskilling during family time, reinforcing time management, patience, and adaptability skills essential in fast-paced tech environments.
- Completed comprehensive courses in React.js and advanced data structures & algorithms, maintaining relevancy in software engineering trends and techniques.
- **React - The Complete Guide 2024 (Udemy):** Acquired comprehensive understanding and hands-on experience in React.js, including its latest features and best practices for scalable and efficient web application development.
- **Mastering the Coding Interviews: Data Structures and Algorithms (Udemy):** Enhanced problem-solving skills and deepened understanding of data structures and algorithms, crucial for writing optimized code.

**Java Developer / Network Communication Engineer | TCP Sliding Window Implementation**

Stack: Java, Java Socket | Summer 2022

- Developed server and client application using **Java Socket** library to observe reliable data transmission.
- Implemented three-way handshake protocol between server and client to establish connection. Reduced connection failures by 20% percent and enhanced overall system stability.
- Optimized data transmission efficiency by utilizing **TreeSet** algorithm for buffering, which reduced data transfer delays by 50% and improved reliability of client-server communications.
- Demonstrated understanding of TCP congestion control techniques, mitigation network congestion and maintaining efficient transmission rates.

**Software Engineer, Agile / React Developer | Wordle Game** | <https://rb.gy/vwbdjk>

Stack: React, JavaScript, Django | Spring 2022

- Collaborated with a 6-person team in an **Agile scrum** environment; troubleshooting and tracking work items via **ZenHub** Kanban board which increased team productivity by 30% percent through efficient tracking.
- Enhanced code reusability by developing a dynamic color-changing letter Grid using **React** Library. Improved code maintainability and development efficiency by 50% percent.
- Facilitated team collaboration by conducting code reviews, ensuring 99% success rate in bug detection before production.

**Developer | Flight Management System** | <https://rb.gy/nv9muf>

Stack: JavaScript, JSP, PSP, Oracle DB | Summer 2021

- Led a team of 4 collaborating to develop a **Full Stack** web application that significantly enhanced flight management processes, leading to a measurable 30% increase in efficiency.
- Leveraged **Docker** to streamline database management, leading to improving productivity that reduced setup time by 50%

- Created user login and signup functionality using **JavaScript** and **JSP**, integrated with **Servlets** for efficient data retrieval, ensuring seamless access to the application's features.
- Implemented and designed user-friendly functionalities (flight addition and search features), enhancing the overall user experience; empowering users to efficiently manage their travel plans.

## EDUCATION

**Master of Science in Computer Science** | University of Texas at Austin | Start Date: **Spring 2025**

**Bachelor of Science in Computer Science - Cum Laude** | San Jose State University | 2022

- *President's Scholar Award; Dean's Scholar Award*
- Relevant Coursework: Computer Networks, **Data Structures and Algorithms**, **Object Oriented Design**, Intro to Computer Systems, iOS Development, **Android Development**, Computer Architecture, Intro to Database Management System, Operating Systems, Programming Paradigms, Information Security, Technical Writing, **NoSQL Database System**