Kazi Shadeen Morshed

kmorshed@uoguelph.ca | linkedin.com/in/kazi-shadeen-morshed/ | github.com/kmorshed31

EDUCATION

University of Guelph   Guelph, ON
Bachelor of Engineering in Computer Engineering   *September 2023- Ongoing*

EXPERIENCE

Undergraduate Research Assistant   May 2025 – August 2025
University of Guelph   *Guelph, ON*
- Developed a Bluetooth application that scans, connects, sends and receives data with connected devices.
- Created an ESP32 BLE server with custom service/characteristics that allows a browser client to write data to the ESP32 and receive notifications back, enabling two-way communication.
- Worked with the motor of a robotic car designed to run on uneven surfaces.

PROJECTS

Bluetooth App for ESP32 | *University of Guelph*   May 2025 – August 2025
- Developed a Progressive Web App (PWA) using HTML, JavaScript, and Service Workers to enable offline functionality and installable mobile-app experience.
- Integrated Web Bluetooth API for real-time, bidirectional communication between browser and ESP32 microcontroller.
- Deployed on GitHub Pages with HTTPS hosting, custom manifest, and icons for cross-platform access and mobile home-screen installation.

Express REST API Starter with SQLite | *Personal Project*   May 2025 - August 2025
- Built a REST API in Express with clean layer, consistent errors, request ID logging and Swagger docs.
- Integrated SQLite via Node 22 node:sqlite, created SQL schema and simple migrations.
- Set up environment based config for PORT and DB_FILE, enabled easy switching between memory and SQLite drivers

QuickTask | *Personal Project*   January 2025 – February 2025
- Developed a Task Manager with task creation, real-time calendar view and offline data storage.
- Wireframed the UI with TLDraw and build a basic responsive frontend using HTML5, CSS3, JavaScript and Local Storage.
- Enhanced skills in frontend development, responsive design, basic user-centered UI/UX, and client-side storage management.

Digital Board Game | *University of Guelph*   January 2024 – March 2024
- Collaborated in a team to develop Java code for a fully functional board game.
- Designed the GUI and integrating assets with the game code, game including version control and debugging
- Successfully completed project in a timely manner with 100 percent grade.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, HTML/CSS
Libraries and Frameworks: MongoDB, Express.js, React.js, Node.js, Tailwind CSS, Fastify
Developer Tools: Git, VS Code, IntelliJ

RELEVANT COURSES

CIS*2520(Data Structures): Learned core Data Structures (arrays, stacks, queues, linked lists, trees) and achieved 80 percent in the course.

ENGG*1420(Object Oriented Programming): Completed an Object-Oriented Programming course, achieving proficiency in core OOP principles and achieved 85 percent in the course.