

Sheraj KC

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EDUCATION

George Mason University

Bachelor of Science in Computer Science

May 2026

Fairfax, VA

- GPA 3.85/4.00
- Honors/Awards: Tech Talent Award Scholarship, Dean's List
- Relevant courses: Data Structures and Algorithms, Object-Oriented Programming, Low-Level Programming, Full Stack Web Development, Databases

EXPERIENCE

Software Engineering Intern

Mathtech Inc

May 2024 – Present

Falls Church, VA

- Developed a time-tracking web application using the MERN stack for hardware technicians at Mathtech Inc., featuring a stopwatch, total time calculations, CRUD operations, and note storage, improving time-tracking tasks for 5 technicians.
- Integrated the time tracker with another developer's management application, enhancing technicians' efficiency by consolidating functionalities into a single website.
- Created a MERN full-stack application to mock the front panel of a crew station, replicating all functionalities of the original hardware, including buttons, knobs, and dials
- Utilized web sockets with Socket.IO to create a constant connection between 5 crew station clients allowing for continuous communication between clients and server.

SKILLS

Languages: Python, Java, C, JavaScript, SQL, HTML, CSS

Technologies: MongoDB, Node.js, Firebase, Linux, VScode

Frameworks: Django, Express.js

Libraries: React.js, Redux

Tools: Git, JUnit

PROJECTS

Fitness Tracker | *MongoDB, Firebase, Express.js, React.js, Node.js*

[View Project](#)

- Developed a comprehensive fitness tracking web application with features such as an interactive calendar, personalized workout routines, record tracking, and a filterable workout library.
- Implemented secure user authentication with JSON Web Tokens (JWT) to restrict access to protected routes for authenticated users only.
- Integrated Google authentication and image upload functionalities using Firebase for seamless user experience and efficient data storage.
- Leveraged the React Redux library for effective state management for users.
- Deployed the application on the Render cloud platform, successfully hosting and managing the site for over 15 active users.

AirDrop Network Emulation | *Java, JUnit*

[View Project](#)

- Generated an ad-hoc wireless network emulation in Java, utilizing a custom graph data structure to simulate network behavior.
- Employed rigorous testing with JUnit to validate the custom graph data structure implementation, achieving a 98% success rate in black-box testing.
- Implemented Dijkstra's and Prim's Algorithms to calculate shortest paths and minimum spanning trees, respectively.

Instagram Clone | *Django, SQLite, Git*

[View Project](#)

- Developed Chatter, an Instagram clone using Django, enabling users to like, comment, and upload posts.
- Implemented an infinite feed feature, dynamically generating random posts alongside user-generated content.

CERTIFICATIONS

CodePath: Intermediate Web Development — React (February 2024 - May 2024)