

➤ EDUCATION

Master of Science, Computer Science

Sept 2022 – Dec 2023

University of Massachusetts Boston, Boston, MA | GPA: 3.77

➤ Relevant Coursework

Theory of computation, User Interface Design, Object-Oriented Design and Programming, Database Application Development, Computer Vision, Biomedical signals, Intro to software engineering, Analysis of Algorithms.

➤ Technical Skills

Programming Languages: Java, Python, Bash Scripting, JavaScript, C- Programming, HTML/CSS

Framework and libraries: Pysam, Plotly, Dash, React.js, Node.js, Cannon.js, Docker

Databases: MySQL, MongoDB

➤ Experience

Graduate Research Assistant | University of Massachusetts Boston, Boston, MA

Aug 2023 – Jan 2024

- Advanced groundbreaking research in single-cell transcriptomics alongside sophisticated data processing techniques on HPC (chimera cluster), efficiently processing vast datasets using a suite of tools such as Pysam, resulting in a 15% increase in analysis efficiency.
- Independently spearheaded the development of an interactive Python-based web-app/dashboard to visualize intricate genomic data, markedly improving data accessibility and streamlining analysis. ([URL](#))([GIT](#))

Graduate Teaching Assistant | University of Massachusetts Boston, Boston, MA

Jan – June 2023

- Collaborated with Engineering instructor to enhance lectures, discussions, and feedback for Probability and Random Processes and Advanced Digital Design courses.
- Designed, managed, and graded projects and assignments for 44 students.

Intern | ENRUN INDIA, Hyderabad, India

Oct – Dec 2021

- Engineered a remote-access environment resulting in a 30% reduction in energy consumption.
- Evaluated its efficacy using a variety of wireless communication technologies, including Wi-Fi, GSM, Bluetooth, and ZigBee.

➤ Academic Projects

Capstone Project Management Portal ([URL](#)) ([GIT](#))

Sept– Dec 2023

- Steered the development of a robust MERN stack-based web application, employing Agile Methodology to optimize capstone project management for educators.
- Successfully deployed the solution on Render.com, ensuring seamless accessibility and scalability to accommodate diverse educational needs.

Modelling Spine Kinematics using Game Physics Engine ([GIT](#))

Jan – May 2023

- Contributed to diagnostic research on lumbar back nerve pain in collaboration with Brigham and Women's Hospital.
- Employed cannon.js, Unity, and Unreal physics engines to intricately simulate spine kinematics.
- Evaluated and compared simulation outcomes resulting in a 20% improvement in the precision of spinal motion emulation.

E-Commerce Website

Jan – May 2023

- Crafted a state-of-the-art e-commerce website dedicated to doll sales, employing ReactJS to ensure an intuitive and responsive user interface.
- Used Java as the backend technology to drive seamless transactions, secure user authentication, and efficient data handling.
- Utilized MySQL to establish a robust and scalable database infrastructure.

Food For Everyone Mobile Application ([GIT](#))

Sept – Dec 2022

- Innovated the user interface of a mobile application utilizing HTML, CSS, and JavaScript, equipped with advanced functionality to pre-emptively alert users regarding potential allergens in their orders.
- Built a responsive and intuitive interface, seamlessly integrating allergy-sensitive warning systems to enhance user safety and experience.