

## EDUCATION

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- **University of Rochester, Major GPA: 3.7** Rochester, NY  
*Bachelor of Science in Computer Science, Minor in Business Management* December 2023
  - Relevant Coursework: Data Structures and Algorithms, Object Oriented Programming, Mobile App Development (Android), Artificial Intelligence, Database Management, Introduction to Data Science, Computational Statistics, Linear Algebra, Web Programming, Design and Analysis of Efficient Algorithms.

## EXPERIENCE

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- **Information Technology Department, University of Rochester** Rochester, NY  
*Web Developer* August 2022 - Present
  - Increased user engagement by 12% by adding React.js & TailwindCSS components such as a task scheduler and appointment calendar to LASSO website.
  - Learned multiple threading, concurrency, design patterns, and their impacts on application concurrency.
  - Channeled communication between LASSO users and our team of 5 to improve user satisfaction by 31%.
  - Upgraded the schedule component to use hourly blocks which increased number of picked up shifts by 27%.
- **Department of Computer Science, University of Rochester** Rochester, NY  
*Workshop Leader* January 2021 - Present
  - Facilitated two weekly recitations of 15+ students each by reviewing core concepts covered in lectures.
  - Led discussions to find alternate solutions to the workshop problems.
  - Mentor and tutor students in 1-on-1 sessions for Data Structures, Analysis of Algorithms, and Java programming.
  - Engaged with concepts outside the class that have improved course retention rate by 18%.
- **STEM-Away** Remote  
*Natural Language Processing Intern* June 2021 - August 2021
  - Collected and analyzed Discourse Hub Community data to build a forum post recommendation system.
  - Used Decision-trees, text-classification, and Feedforward-neural-network to classify posts with 83% accuracy.
  - Used **BeautifulSoupe** and **Scrapy** to scrape data from Discourse Revoult forum.
  - Tried different data preprocessing techniques adopting **Pandas** and **NumPy**.

## PERSONAL PROJECTS

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- **Self-driving Car**  
*Summer 2022 — [github.com/3bdrahman/Self-driving-car](https://github.com/3bdrahman/Self-driving-car)*
  - Designed a 2-D representation of traffic, controls, sensors, and collision detection using **Vanilla JavaScript**.
  - Implemented a multi-level feed-forward neural network that output controls utilizing wights and biases inputs.
  - demonstrated the processes of the Neural Network with a Visualizer section.
  - Improved the neural network performance by adding **Parallelization** of the model and **Mutation** of the inputs.
- **Amazon Clone**  
*Summer 2022 — [github.com/3bdrahman/Clozon](https://github.com/3bdrahman/Clozon)*
  - Built a ReactJS Amazon clone with Firebase Authentication, Firestore Database, React Router, React Context.
  - Added Stripe payments functionality with the **Stripe** API.
- **Airbnb UI Clone**  
*Summer 2022 — [github.com/3bdrahman/Airbnb-clone](https://github.com/3bdrahman/Airbnb-clone)*
  - Created a UI clone of Airbnb practicing **NextJS**, **Tailwind** CSS.
  - Illustrated listed stays employing **Mapbox** API.
  - Represented stays and locations with dummy APIs hosted on JSON Keeper.
- **Sorting Algorithms Visualizer**  
*Summer 2022 — [github.com/3bdrahman/SortingVisualizer](https://github.com/3bdrahman/SortingVisualizer)*
  - Used React and React Components to represent the Sorting problem.
  - Implemented **Bubble Sort**, **Insertion Sort**, **Selection Sort**, and **Merge Sort** using JavaScript.

## PROGRAMMING SKILLS

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- **Languages:** Java, JavaScript, Python.
- **Technologies:** HTML, CSS, ReactJS, NextJS, ExpressJS, MongoDB, jQuery, XML, Bootstrap, Git, Android Studio, Firebase.