

# HARRISON HUTTON

## Software Engineer

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## EXPERIENCE

### Senior Teaching Assistant

University at Buffalo

📅 08/2020 - Present 📍 Amherst, NY

- Supervised and motivated groups of 20 computer science students through weekly lab activities (**250+ students total**).
- Communicated algorithms and complexity analysis ideas to classes of 25 students through weekly recitations (**150+ students total**).

### Software Engineering Intern

Moog, Inc.

📅 06/2023 - 08/2023 📍 East Aurora, NY

- Adapted an open-source, **ROS** Ackermann-drive system to fit the **automated steering** needs of a pack mule vehicle.
- Evolved a complex **URDF Xacro** description of this vehicle to allow for simulation using **Rviz** and **Gazebo**.

### Tech Intern

M&T Tech (F500 Bank)

📅 06/2022 - 08/2022 📍 Buffalo, NY

- Developed and stylized a front-end document search platform using **Angular** and **Bootstrap** for internal banking services.
- Saved M&T \$4 million per year going forward by producing a central user interface where employees can probe every internal document repository.

## PROJECTS

### GOMAD Admin Management System | Tech Lead

📅 01/2023 - Present

- Designed a **SaaS** web app for my high school's music and drama booster board.
- Reduced web hosting costs by 94% by migrating from GoDaddy to **Firebase Hosting** and **Authentication**.
- Purchased their domain and managed DNS settings to host a public website and an admin-only platform.
- Utilized **Angular** and **Firebase's Firestore Database** to create a real-time, vendor-management service that automates tedious work such as sending emails and updating vendor balances.
- Engaged a team of 3 developers in the execution of the vision for the app by holding consistent stand-up meetings and by following **Agile** principles.

### Raft Distributed Consensus Protocol | School Project, CSE 586: Distributed Systems

📅 02/2022

- Implemented the fault-tolerant Raft Consensus Protocol in **Go**.
- Applied message-passing techniques to handle leader elections, heartbeat detection, and data commitment via serialized **protobuf** messages.

### Minor Prophets | School Project, CSE 442: Software Engineering

📅 08/2021 - 12/2021

- Developed, in an **Agile** environment, a fast-paced, multiplayer, music-trivia game for my Software Engineering course.
- Prioritized professional organization by writing **user stories** on **Zenhub**
- Integrated the **Spotify API** via the **Spotipy** Python library to randomly generate trivia questions based on current, popular music.

## EDUCATION

### MS in Computer Science and Engineering

University at Buffalo

📅 05/2024

### BS in Computer Science, Applied Math

University at Buffalo

📅 05/2024

## SKILLS

Python

OCaml

Angular

Go

Firebase

Github

Linux Terminal

Unit Testing

Software Verification

Leader

Open-Minded

Optimistic