

AL-KESNA FOSTER

Phone: 929-339-5691 **Email:** alkesnaf@buffalo.edu **Personal Website:** alkesnaf.github.io **LinkedIn:** linkedin.com/in/alkesnaf

EDUCATION

University at Buffalo, The State University of New York

Master of Science, Computer Science

Sep 2024 - Dec 2025

Buffalo, NY

University at Buffalo, The State University of New York

Bachelor of Science, Computer Science - GPA: 3.46

Sep 2020 - May 2024

Buffalo, NY

WORK EXPERIENCE

University at Buffalo Department of Computer Science and Engineering

Teaching Assistant

Sep 2021 – Present

Buffalo, NY

- Mentored **300+ students** in C and Go programming assignments
- Led weekly labs covering low-level systems programming concepts such as system calls, memory management, threads, and concurrency
- Held weekly office hours troubleshooting distributed systems projects in Go, covering topics such as failure detection, distributed data structures, and consensus

Computation and Equity Lab at UB

Student Researcher

May 2021 – May 2024

Buffalo, NY

- Fine-tuned a large language model on **200+ million tweets** using TensorFlow and Apache Spark, to detect political stances, allowing the team to understand why people exit the democratic process
- Used natural language processing(NLP) to qualitatively analyze **400+** text responses from computer science freshmen, deriving insights on major retention rates
- Utilized Pandas and linear regression modeling to research and present effects of employment services on foster youths' full-time employment rates

Meta

Data Science Intern

Jun 2022 – Aug. 2022

Menlo Park, CA

- Analyzed Facebook video data using Python, Pandas, and statistical analyses, increasing the engagement of **1 million+ young adults** on Facebook videos
- Managed and queried large databases using SQL to obtain relevant datasets for analysis
- Wrote official documentation, created compelling data visualizations, and presented recommendations to senior engineering leadership

PROJECTS

DateFinder - Web Application | Python, JavaScript, NodeJS, HTML, CSS, Git

Aug 2024

- Created a web application to find dates in any area based on user preferences
- Utilize Google API to develop a Python script for finding restaurants and activities in a given location
- Used NodeJS, Snowpack, Javascript, HTML, and CSS to implement an intuitive user interface

Nize - Web Application | PHP, ReactJS, JavaScript, HTML, CSS, Git

Dec 2023

- Designed full-stack web application to be an organizational tool for students with an integrated calendar, to-do list, and file storage system using scrum methodology
- Developed the app utilizing ReactJS, JavaScript, HTML, and CSS for the frontend, PHP for the backend, and Git for version control
- Engineered, tested, and implemented features such as registration, functioning friend lists, password recovery, and search bar

Raftm - Consensus Algorithm | Go

Apr 2023

- Implemented Raft consensus algorithm in Go to maintain consensus in a distributed server cluster
- Developed leader elections and consistent state machines to ensure a fault-tolerant system
- Utilized UDP-based communication protocols to pass messages between client and servers

TECHNICAL SKILLS

Programming/Query Languages: C, Go, JavaScript, Python, SQL

Technologies/Frameworks: Apache Spark, CSS, Git, HTML, NodeJS, Pandas, ReactJS, TensorFlow

AWARDS/EXTRACURRICULAR

Engineering Design and Innovation Scholar

Aug 2024

Academically exceptional students committed to solving societal problems through engineering and computing projects

CSE Undergraduate Researcher Award

May 2024

Recognized for exceptional research in collaboration with UB CSE faculty during undergraduate studies

NSBE

Sep 2021

Member