# Nicholas Meisburger

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#### Education

Rice University, Houston, TX Bachelor of Science in Computer Science Bachelor of Arts in Mathematics **GPA: 4.00**May 2022
May 2022

## Relevant Coursework

Linear Algebra | Multivariable Calculus | Algorithmic Thinking | Fundamentals of Computer Engineering |
Reasoning About Algorithms | Tools and Models Data Science | Introduction to Program Design

#### Skills

<u>Computer Skills:</u> Python, Java, C/C++, High Performance Computing with MPI, OpenMP, and CUDA, JavaScript, HTML/CSS, ReactJS, NodeJS, ExpressJS, AngularJS, Latex

# **Projects**

Forum Web App

January 2019

- → Designed and implemented a web app for creating and updating posts about project ideas for HackRice
- → App features include the ability to create, and update accounts for users, ability to write and vote on ideas, and ability for admin accounts to be created to monitor and regulate users and posts.

Rice Datathon 2019 | Project:Stock Analysis with Neural Networks January 2019

- → Designed and implemented back propagation neural network, receiving Best Underclassmen Project
- → Applied deep learning algorithm to real world stock data to create model used to generate predictions for future trends and stock changes

# **Experience**

Research Intern

May 2019 - Present

RUSH Lab, Rice University

- → Developed Distributed implementation of <u>Fast Locally Sensitive Hashing Algorithm for Similarity Search accelerated with HPC</u> designed for ultra-high dimensionality datasets
- → Designed efficient implementation capable of running on multi-node clusters
- → Incorporated algorithms such as Densified One Permutation Hashing and Top K API (a variation of Count Min Sketch) as well as MPI and OpenMP libraries to reduce time and memory costs

## Project Coordinator Intern

June 2018 - August 2018

Day CPM, Portland OR

- → Created live-updating project dashboards to streamline communication and increase accessibility and accuracy of project information, saving an estimated 5-10% of time for project managers
- → Analyzed and overhauled project budgets to ensure correctness and clarity
- → Developed and administered organizational systems, such as document repositories and file systems, to improve efficiency

## **Activities/Honors**

## Rice Datathon Chair/Head Organizer

Spring 2019 - Present

→ In charge of planning and organizing the annual Rice Data Science competition

## McMurtry College Website Committee Head

Spring 2019 - Present

- → Head of developing and maintaining the website for McMurtry Residential College
- → Designed and coded and entirely new website for the college that improved UI/UX elements and optimized the performance of the mobile version

# Hack Rice 9 Planning Committee Head

Winter 2019 - Present

- → Creating, administering, and organizing website for event
- → Managing publicity and logistical elements

## Head of Remix CS Curriculum Planning Committee

Spring 2019 - Present

- → Member of Remix CS Leadership Committee in change of curriculum
- → Planned and prepared curriculum and exercises as part of an organization to teach and mentor high school students in Computer Science