Sarthi Mathuria

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EDUCATION

University of Texas at Austin   May 2024
BSA in Computer Science, Minor in Business   Austin, TX
GPA: 3.87

SKILLS

Languages : Java, R, C, JavaScript
Tools/Platforms/Frameworks : React.js, HTML, CSS, Git, SQL
Courses : Data Structures and Algorithms, Procedural Programming, Computer Architecture, Linear Algebra, Discrete Mathematics, Probability and Statistics

EXPERIENCE

Congressional Campaign   Summer 2020
Data Analyst Intern   Nashville, TN

- Implemented predictive voter turnout modeling using linear regression
- Designed efficient SQL database schemas to model relationships between raw data and voter segments

Rice University STEM Department   Summer 2019
Data Analytics Research Intern   Houston, TX

- Researched and designed data simulations using Mechanics and Bayesian statistical reasoning
- Utilized Java and focused on OOP design patterns to emphasize code reuse

PROJECTS

Huffman Compressor

- Developed a lossless data compression program that uses binary trees, priority queues, and hash maps
- Built on top of the Huffman Compression Algorithm
- Utilized Java with OOP design principles

Sorting Visualizer

- Created an application for visualizing 5 sorting algorithms
- Built using JavaScript, HTML, CSS and deployed on Github Pages
- Visualize it here: https://sarthi-mathuria.github.io/Sorting-Visualizer/

Evil Hangman

- Developed a Java program that plays against the user in the classical Hangman game
- Implemented 3 levels of difficulty that can be changed via terminal flags
- Optimized the core algorithm via caching with Java Hashmaps