

Vivek Kapur

vivek.kapur@case.edu | 832.277.1576 | Cleveland, OH

EDUCATION

CASE WESTERN UNIVERSITY

BS IN COMPUTER SCIENCE

May 2022 | Cleveland, OH

GPA: 3.9 / 4.0

ST. JOHN'S SCHOOL

May 2019 | Houston, TX

GPA: 91.3 / 100 | SAT: 1540/1600

Subject Tests: Math (800), Physics (740)

COURSEWORK

UNDERGRADUATE

Introduction to Programming in Java

Introduction to Data Structures

Software Engineering

Artificial Intelligence in Healthcare

Logic Design

Discrete Mathematics

Multivariable Calculus

Statistics in R

HIGH SCHOOL

AP Calculus BC

Engineering Physics II Honors

Engineering Innovation and Design I

Scientific Research & Design

AP World History

AP English

AP French

SKILLS

PROGRAMMING

Languages

Java • Python • Javascript

Typescript • C++ • R • SQL

React • Node • Flask • Prisma

GraphQL • Mocha • Chai • Jest

LANGUAGES

Fluent

English • Hindi • French

Proficient

Portuguese

AWARDS

2020

HackCWRU 2020 Best Hardware Hack

2019

Case Western Dean's High Honors

\$22,500 Case Western University Scholarship

2018

Presidential Volunteer Award Gold

Investment Club Stock Portfolio Prize

PSAT Commended Scholar

EXPERIENCE

CENTER FOR SCIENCE & LAW | DATA SCIENCE INTERN

June 2020 – Aug 2020 | Houston, TX

- Designed a visualization tool to demonstrate connections and overlaps between different crime types
- Wrote scripts to clean, organize, and merge datasets using R to create a comprehensive database of school shootings

PROJECTS

CAMPUS LIVE | APPLICATION DEVELOPER

August 2020 – Present | Cleveland, OH

- Created a web application to facilitate event hosting on college campuses
- Worked with a React frontend and Node backend, using GraphQL endpoints, a PostgreSQL database, and a Prisma ORM, implementing Mocha, Chai, and Jest for unit and functional testing

DONATION MATCHER | APPLICATION DEVELOPER

July 2020 – Present | Houston, TX

- Created an application that connects potential donors to employees working at companies that match donations, ensuring that every dollar can go further
- Worked with Flask, Node, and Express in the backend, as well as React Bootstrap in the frontend, implementing GraphQL for the API

HUFFMAN ENCODING | APPLICATION DEVELOPER

March 2020 – April 2020 | Cleveland, OH

- Designed and programmed a lossless Huffman encoding algorithm that compressed text files into binary
- Implemented a priority queue to sort a list of character frequencies to be inserted into a binary tree

GOMOKU | APPLICATION DEVELOPER

November 2019 – December 2019 | Cleveland, OH

- Designed and programmed the game of 'Gomoku' with rule variations in Java, working on the backend algorithms as well as the frontend GUI
- Optimized the winning condition in the backend by implementing a dynamic algorithm to check horizontal, vertical, and diagonal lines efficiently

GROUPS

DHAMAKAPPELLA | BEATBOXER

Aug 2019 – Present | Cleveland, OH

- Arranged and beat-boxed with Case Western's South Asian a cappella group at competitions on the National South Asian A Capella Circuit and the International Championship of Collegiate A Capella Circuit

ROBOTICS CLUB | PRESIDENT

Sept 2017 – May 2019 | Houston, TX

- Built and programmed VEX robots to compete in intrastate tournaments
- Designed and created robots that could stack cones and move objects during a 30 second automated period and a remote control period

HOUSTON FOOD BANK | STUDENT HERO

Sept 2015 – May 2019 | Houston, TX

- Led and managed volunteer groups of 50+ people in the different project areas at the nation's largest food bank
- Trained other Student Hero Volunteers and incoming recruits