**SATISH VADIVELU**

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**Education:**

**Texas A&M University at College Station, TX | Expected Graduation: May 2021**

Bachelors of Science in Industrial Distribution

**Relevant Coursework:**

* *Introduction to Program Design and Concepts* - Learned C++ nuances and implemented various abstract data structures.
* *Discrete Structures for Computing* - Became proficient in discrete mathematics for analyzing computer algorithms, for both correctness and performance.
* *Introduction to Java and Programming* - Learned basic syntax and standard practices for algorithm design, data representation, structured and object-oriented programming, testing, and portability of Java.
* *Data Structures and Algorithms* (current class) – Understanding data structures and their implementations through algorithms such as sorting and searching, queues, lists, hashing, and etc. to analyze the tradeoffs between runtime and memory usage of programs.

**Experience:**

*Texas A&M Hackathon* | January 2019

* Built a sentiment analysis generator towards businesses and people utilizing the twitter and nltk apis
* Explored how to connect front-end and back-end processes through Django server and AJAX

**Projects:**

## *Calculator* | Java | December 2018

* Lead a team of 4 and facilitated different assignments
* Designed and programmed a 5- function calculator using the GUI interface

## Utilized ArrayLists in order to dynamically account for order of operations and displaying the entirety of an equation to be solved

*Temperature Quarrying*| C++ | December 2018

* Extracted various temperature data for contrasting locations and dates ranging from 1800 to 2018 from a multitude of .dat files
* Stored the extracted data into a singly linked list

## Traversed through the linked list to compute the average and/or mode of a data set between a precise range of dates, and queried the database information into a comprehensible .dat file

*Store Backend* | C++ | November 2018

* Created the backend program to organize different components and data for a store

## Employed overloaded operators to redefine operators for objects and structures of the store

*Mountain Paths* | C++ | October 2018

* Extracted various elevation data points and stored it into a 2D Array
* Manipulated the data points and utilized parallel data structures to transform data and formulate using the Grayscale formula, and mirroring the data to a parallel Pixel struct of RGB

## Outputted the shortest mountain paths, by applying the Greedy Method, to a .ppm file

## *Tic Tac Toe*| Java GUI | September 2018

* Developed a computer AI to win/tie against a human in a game of Tic Tac Toe

## *Paddle Ball*| HTML, CSS, JavaScript | August 2018

* Designed and constructed an intricate paddle ball game with increasing speeds of the ball after touching the ground

**Skills**

*Computer & Foreign Languages*

* Proficient in Java and C++
* Familiar with HTML, CSS, SQL, Python, and JavaScript
* Fluent in Telugu and Tamil