Sonika Reddy Madhu

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EDUCATION

Texas A&M University | College Station, Texas **Expected Graduation May 2026**
Program: B.S. – Computer Science, cumulative GPA: 3.912
Stephen F Austin High School | Sugarland, Texas **2018-2022**
Cumulative GPA: 4.0

RELEVANT COURSEWORK

STEM: Pre-AP Chemistry, AP Chemistry, Pre-AP Biology, AP Biology, AP Physics, Pre-AP Algebra 2, Pre-AP Precalculus, AP Calculus BC.
Undergrad: Multivariable Calculus, Newtonian Mechanics, Program Design & Concepts, Intro to Computing, Discrete Structure Computing, Data Structures & Algorithms, Computer Organization, Programming Languages, Principles of Statistics, Linear Algebra

SKILLS & TECHNICAL TOOLS

Computer Skills: Proficient in Java, C++, git/Github, MySQL Workbench, R Studio, Logisim Evolution, x86-64 Assembly, Microsoft Excel
Personal Skills: Time management, critical thinking and problem solving, self-awareness, collaboration, assertiveness, active listening, taking responsibility, flexibility, building interpersonal relationships. Proficient in Spanish.

WORK EXPERIENCE

10/8/21- 8/12/22
Assistant Teacher/Grader
Best in Class Education Center

While holding this position I helped kindergarten - 6th grade kids by reviewing their homework, administering tests, and keeping them on task and focused. Through this experience I learned how to effectively communicate with a wide range of age groups.

PROJECTS

Building a RISC-V Style Processor

Designing and building a processor (following Von Neumann architecture) using Y86-64 ISA on Logisim evolution. Implemented six stages: Fetch, Decode, Execute, Memory, Write Back, PC Update and tested the processor using three assembly programs we wrote (Palindrome Checker, Bubble Sort, Summing first 100 numbers).

Mental Health Prediction Model | Python

Extensively trained AI model that implemented Machine Learning (supervised and unsupervised) and data analysis to output a Decision Tree Classifier with 70.63% accuracy.

Tic Tac Toe | Python

Implemented graphics programming, libraries, and consolidating data with classes to accommodate user input and create an interactive tic tac toe game against the computer.

Simple Hangman | Python

Employed control structures, libraries, and user input to create an interactive game.

LEADERSHIP EXPERIENCE

Speech & Debate | Speech Co-Captain **2019-2021**

While holding this position I learned effective communication skills and taking responsibility as I advised novice members on improving their tone (pace and flow), confidence levels, body language/posture, and the content of their speeches.

EXTRACURRICULAR ACTIVITIES

Science National Honor Society | Member **2020-2022**

This organization allowed me to take part in national science competitions and develop effective study habits.

Math National Honor Society | Member **2020-2022**

This organization allowed me to expand my knowledge in mathematic fields by taking part in local, state, and national level math competitions and tutor underclassmen who need extra help in their math classes.

Spanish National Honor Society | Officer **2020-2022**

This organization immersed me in the unique traditions of Latin America and allowed me to hone my Spanish skills.

Women in Engineering | Ambassador **2022- Till Date**

By arranging and participating in social and professional events, this program exposed me to companies and college alumni.

Hindu Student Association | Member **2022 – Till Date**

The weekly meeting and socials allow me to connect with my heritage and engage with my peers.

VOLUNTEER EXPERIENCE

NextGen Mentorship Program **2020- 2021**

Tutoring math and science during Covid-19 has allowed me to work on my communication and time management skills.

Community Volunteering **2018-2019**

Gardening: This volunteering opportunity taught me life skills related to agriculture, crop growing, and harvesting.

AWARDS & CERTIFICATES

Academic Excellence Award **2018-2020**
AP Scholar with Distinction
AI4ALL Certificate of Completion

This certificate recognizes the satisfactory completion of the AI4ALL Discover AI course on April 28th 2023.