# Sanjana Yadav

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## **EDUCATION**

### **UNIVERSITY OF TEXAS - AUSTIN**

BS IN COMPUTER SCIENCE Aug 2019 - May 2023 | Austin, TX Turing Scholars Honors Program Cum. GPA: 3.63 / 4.0

## LINKS

Website:// sanjanayadav Github:// sanjana879 LinkedIn:// sanjana-yadav-614367185

# COURSEWORK

#### **HONORS**

Computer Architecture
Data Structure
Discrete Math
Introduction to CS Research

#### **TRADITIONAL**

Robot Learning
Probability
Multi-variable Calculus
Competitive Programming
Algorithms Design and Analysis Part 1
(Coursera)

#### **CURRENTLY TAKING**

Operating Systems (Honors) Competitive Programming Linear Algebra Algorithms Design and Analysis Part 2 (Coursera)

# SKILLS

#### **PROGRAMMING**

Proficient:

Java • C • Python (Django, nltk) • SQL

- Verilog HTML/CSS/Javascript React
- Firebase

Exposure:

C++ • x-86 Assembly • Flask • React Native

#### **TECHNOLOGIES**

Git • Terminal • JUnit • Mocha/Chai

• GTKWave • LATEX

#### **EXPERIENCE**

#### **TURNUP** | Software Engineering Intern

June 2020 - Aug 2020 |

- Creating and maintaining Firebase database for website
- Team Lead Reviewed pull requests, organized assignments, planned meetings

# **PROJECTS**

## **SPOTIFY EXTENSION** Summer 2020

- A full stack application that analyzes an album based on its audio with the Spotify API and lyrics with **Natural Language Processing**
- Sentiment analysis that determines the level of positivity/negativity and 8 emotions in the album
- Technologies Used: Python (Django, nltk), HTML/CSS

#### WEBCRAWLER December 2019

- A web crawler and search engine that handles complex logical queries
- Crawled 9000+ webpages in seconds and indexed them in HashMap saved to disc in under 16 mb
- Technologies Used: Java, JUnit Testing, HTML

#### SECURE YOUR FLIGHT November 2019

- Constructed a web application in 25 hours that used American Airlines and Google Maps API and crowd-sourced data on security wait times to calculate when to leave for the airport
- Technologies Used: SQLite, APIs, Python/Flask, HTML/CSS

#### UNIX SHELL May 2020

- Created command-line shell that executes programs
- Features include: background/foreground process handling, redirected input/output, command history, and tab completion
- Technologies Used: C, System calls

#### MULTICYCLE PIPELINED PROCESSOR April 2020

- Designed a multicycle processor in Verilog that utilized pipelining, forwarding, and flushing
- Added branch prediction to decrease average cycles per instructions
- Technologies Used: Verilog, GTKWave

## FUN COMPILER May 2020

- Developed compiler to change FUN programming language to x-86 assembly language and create an executable file
- Handles conditionals, loops, and function calls
- Technologies Used: C, x-86 Assembly Language

# **AWARDS**

- 2019 "Secure Your Flight" Winner of American Airlines Challenge at HackTX
- 2019 UT College of Natural Sciences Scholarship
- 2019 Groce Family Turing Scholarship
- 2019 NCWIT Award for Aspirations in Computing Dallas
- 2018 6th Place Internationally Lockheed Martin Cybersecurity Competition