# JOSEPH QUINN

#### **PROFILE**

Undergraduate computer science student at Vanderbilt University with hands-on experience gained through the Lockheed Martin explorers program. Skilled in programming and problem-solving, eager to contribute to exciting tech projects and the industry's growth.

## **VOLUNTEER**

SECORCARES; PARKER, CO - 2019-2023

Assisting in community outreach programs by participating in food drives, fundraisers, and events aimed at raising awareness and support for the food bank's mission.

#### **INTERNSHIPS**

ENGINEERING EXPLORERS POST, LOCKHEED MARTIN; LITTLETON, CO – 2019-2020 Engaged in aerospace engineering activities, attending industry expert-led meetings on space programs like Maven and Osiris-Rex. Collaborated on hands-on engineering projects, including rover construction and rocket development. Received mentorship from Lockheed Martin Engineers and contributed to technical space hardware projects.

#### **EDUCATION**

ARAPAHOE COMMUNITY COLLEGE, CO – ASSOCIATES OF SCIENCE, 2023 VANDERBILT UNIVERSITY, TN – COMPUTER SCIENCE MAJOR, PRESENT

#### **SKILLS**

Java, Python, HTML, CSS, Javascript, R, Git, MacOSX, Windows OS, Linux OS, Node.JS, Javascript.

## **PROJECTS**

SNAKE LEARNING MODEL

Python implementation of a Deep Q-Learning (DQL) AI reinforcement learning algorithm that plays a basic Snake arcade game.

#### WORD-WISE ALGORITHM

Game algorithm that uses feedback and statistical analysis of letter frequencies to make effective word guesses, systematically approaching the solution.

### HUFFMAN ENCODING

Binary Algorithm used for lossless data compression. It works by assigning variable-length codes to characters in a string based on their frequencies. Includes data decompression using nodes.

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