Sachin Patel

sachpatel1220@gmail.com | Portfolio | LinkedIn | Github

Education

Iowa State University, College of Engineering

- Bachelor of Science in Computer Engineering.
- GPA: 4.0/4.0 || Cumulative Credits: 52.0 || Honors Student

Expected May 2024

Computer Skills

- C, C++, C#, Python, HTML, CSS, JavaScript, Java
- Object-oriented programming, Algorithms, Circuits

Activities

ISU Cardinal Space Mining

(Sep 2020 - Present)

- Build a mining robot that competes in NASA's Robotic Mining Competition.
- Leading the development of all software (mainly in Java) and electrical features.
- Developed command and subsystem programs that will make the robot fully autonomous.

Critical Tinkers

(Sep 2020 - Present)

• Assemble a quadcopter with the horizontal movement controlled by side motors (coded in C/C++).

ISU Robotics Club

(Sep 2020 - Present)

- Designed all mechanical (in SolidWorks) and electrical features of a battle-bot.
- Won ISU's battle-bots competition, with all fights being knockouts.

Selected Projects

Small Rover

<u>Code</u>

- Engineered a rover that uses Arduino, Raspberry Pi, Python, HTML/CSS, and C++.
- A web server controls the rover's multiple features and displays a live feed from its camera.

Video Game

Code Project

• Created a space-inspired video game using **C**# and the <u>Unity Game Engine</u>.

Alt. Snake Game

Code Project

Fabricated an alternate version of the classic snake game using HTML/CSS and JavaScript.

Al Learns in Pygame

Code Project Repl

Developed in Python. An Al, using neuroevolution with NEAT, learns to play a game I made in pygame.

Experience

Undergraduate Research Assistant | Iowa State University. Ames, IA

(Jan 2021 - May 2021)

Research on building reliable wireless networks. Set up a testbed to simulate 5G environments.