

# Hyunmin Yoo

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## EDUCATION

08/22 - 05/26

### Vista Ridge High School (VRHS)

Cedar Park, Texas

Weighted GPA: 5.096

Graduating with Distinguished Honors

SAT: 1450 (M: 760; R: 690)

AP Exams: Computer Science A: 5, Calculus BC: 4,  
Statistics: 4, Physics 1: 4

### Autodesk Certified User-Inventor (ACU-Inventor)

- Certified for demonstrating knowledge of creating, modifying, formatting, and sharing 2D sketches as well as creating parts

### IT Java Specialist (Certiport)

- Certified for ability to recognize, write, and debug Java code that will logically solve a problem

### Google Data Analytics Professional Certificate (Coursera)

- Completed a Google-designed, eight-course program with hands-on projects, gaining proficiency in data preparation, analysis, and visualization using tools like spreadsheets, SQL, Tableau, and R

## RESEARCH

11th - 12th

### Inspirit AI Research Mentorship Program

*Research Mentee Under Anjali Sinha, MA*

4 Hrs/Wk

13 Wks/Yr

- Created an AI program that diagnoses issues within a robot by comparing the data of the robot to the data of the dataset of failures
- Analyzed data to streamline the process of robotic malfunction identification
- Composed a research paper at the end and published the project
- <https://github.com/Ca2lumG/Machine-Learning-Model-Comparison-for-Robot-Diagnosis>

10th

### UT Austin High School Summer Research Academy

*RobIn Student Researcher*

4 Hrs/Wk

5 Wks/Yr

- Constructed a BaRiFlex arm (Robotic Arm) using 3D printer with given instructions
- Programmed codes for recording demos, training the robotic arm, and running the robotic arm
- Recorded over 60 pieces of data of human motions to give sample data to the model for purpose of duplicating the human motion
- Presented slideshow of research progress to audiences of UT Austin visitors

## ACTIVITIES

9th - 12th

### VRHS Robotics - Static Void, Victorian Voltage

*Member*

- Programmed navigation codes in Android Studio for team robot, allowing the robot to automatically navigate its way to the game elements
- Fine-tuned the variables in the robot control system to optimize its game performance
- Supported hardware team to assemble the robot

10 Hrs/Wk  
30 Wks/Yr

10th - 12th

### VRHS eSports Club

*Vice President (11th)*

- Organized weekly after-school practice and club meetings by creating a Google form to assess availability
- Hosted the weekly meeting at school that gave a space to introduce and communicate with each other members

2 Hrs/Wk  
20 Wks/Yr

*Member (10th)*

- Participated as a player at weekly practices to develop decision-making and communication skills

12th

### UT Austin Computer Science Academy for All Machine Learning

40 Hrs/Wk  
1 Wk/Yr

*Participant*

- Gained understanding of use of Python in machine learning
- Discovered knowledge of LDOS (Learning Directed Operating System)
- Created a machine learning model by using a LDOS that later was used to predict the result of the dataset given by the academy

9th

### University of Texas at Austin Academy for Robotics

40 Hrs/Wk  
1 Wk/Yr

*Participant*

- Developed an understanding of basic coding structures to understand robotics programming software more effectively
- Crafted the main board for a robot by soldering the parts given to the board

	<ul style="list-style-type: none"> <li>Assisted in the construction of a robot, that reads the color below by sensor, by assembling the parts</li> </ul>	
11th - 12th	<p><b>VRHS Student Technology Team</b></p> <p><i>Member</i></p> <ul style="list-style-type: none"> <li>Diagnosed and repaired students' and teachers' software/hardware issues to school-related devices</li> <li>Attended daily meetings to hear updates and complete repairs to devices</li> <li>Gained skills to fix issues by continuing practices and repair</li> </ul>	8 Hrs/Wk 30 Wks/Yr
11th - 12th	<p><b>Vista Ridge High School Machine Learning Club</b></p> <p><i>Member</i></p> <ul style="list-style-type: none"> <li>Crafted a proposal for possible implementation of sorting AI in school</li> <li>Discussed strategies to implement proposal into the real school system</li> </ul>	1 Hr/Wk 20 Wks/Yr
9th	<p><b>Leander ISD Summer Robotics Camp</b></p> <p><i>Participant</i></p> <ul style="list-style-type: none"> <li>Learned basic coding system of an autonomous and controlled robot</li> <li>Gained knowledge of how to write codes for a robot in Android Studio</li> <li>Actualized robot that earned 3rd place in robotics camp competition <ul style="list-style-type: none"> <li>Robotic completed tasks like grabbing blocks or launching designated objects</li> </ul> </li> </ul>	7 Hrs/Wk 1 Wk/Yr
9th	<p><b>Inspirit AI Winter Camp</b></p> <p><i>Participant</i></p> <ul style="list-style-type: none"> <li>Practiced multiple Python coding questions with the guiding material to learn basic coding</li> <li>Conceptualized and created an AI program using Python which compares an exoplanet and non-exoplanet to uncover a difference between those two planets</li> </ul>	3 Hrs/Wk 2 Wks/Yr
11th - 12th	<p><b>Inspirit AI Ambassador</b></p> <p><i>AI Educator</i></p> <ul style="list-style-type: none"> <li>Introduced and explained AI and its potential usage to other students, teachers, and parents through presentations</li> <li>Promoted organization by sending emails to boost enrollment</li> </ul>	1 Hr/Wk 8 Wks/Yr
9th - 12th	<p><b>Six Blades Jiu-Jitsu</b></p> <p><i>Student Athlete</i></p> <ul style="list-style-type: none"> <li>Participated in classes that developed social ability and physical strength</li> <li>Practiced 3 times a week and had practice sparring with other people at the end of the week</li> </ul>	3 Hrs/Wk 30 Wks/Yr

11th - 12th	<b>VRHS AP Ambassador</b> <i>Member</i>	3 Hrs/Wk 20 Wks/Yr
<b>VOLUNTEERING</b>		
11th - 12th	<b>Austin Korean School</b> <i>Substitute Teacher</i>	4 Hrs/Wk 13 Wks/Yr
<b>HONORS &amp; AWARDS</b>		
10th	<b>FTC Robotics Semi Regional Competition Motivation Award - 1st Place</b>	
	• Awarded to the team that has significant involvement in outreach that demonstrates their knowledge of computer science, robotics, and FTC robotics	
11th	<b>FTC Robotics Semi-Regional Competition Control Award - 1st Place</b>	
	• Awarded to the team that demonstrated the innovative use of software to enhance robot functionality, focusing on consistent and reliable control systems to solve game challenges	
11th	<b>FTC Robotics League Champions Control Award - 1st Place</b>	
	• Awarded to the team that demonstrated the innovative use of software to enhance robot functionality, focusing on consistent and reliable control systems to solve game challenges	
10th	<b>NAGA Grappling Championship Bronze Medal</b>	
	• Earned Bronze medal at regional Jiu-Jitsu competition	
11th - 12th	<b>Vista Ridge High School Mu Alpha Theta</b> <i>Member</i>	
<b>SKILLS</b>		
	<b>Coding</b>	
	• Java	
	○ Working Proficiency	

- Python
  - Working Proficiency
- C
  - Beginner Proficiency

**Languages**

- Korean
  - Heritage Speaker