

Bisrat Mekonnen

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EDUCATION	CARNEGIE MELLON UNIVERSITY PITTSBURGH, PA <i>Bachelor of Science in Mechanical Engineering</i>	MAY 2023
	HAYFIELD SECONDARY SCHOOL ALEXANDRIA, VA <i>High School Diploma, GPA 4.3</i>	JUN 2019
PROJECTS	RESTAURANT MATCH (15-112 TERM PROJECT) -Used knowledge of python to make a tinder for restaurants -Made use of the Yep API to collect information on restaurants based on the user's address and preferred search radius -Made use of CSV files to store login information -Used the Tkinter graphics package and PIL (Python Imaging Library) to design and display each restaurant profile	APRIL 2020
	BUILD 18 AUTONOMUS PLANE PROJECT - Designed and manufactured RC plane out of foam. - Collaborated with the electrical team to add basic autonomous functions to the plane.	JAN 2020
	MOBOT PROJECT -Constructed a miniature Tesla Truck capable of autonomously completing a racecourse. - Applied knowledge of basic C/C++ programming to have sensors determine the motion of the car. -Used SolidWorks to model and laser cut the car	DEC 2019
	BOOTH/ TRUSS DESIGN PROJECT - Used SolidWorks and stress analysis calculations to model a truss. - One of seven groups to break within the target range of 38 – 42 lbs. - Further developed prototyping skills by making use of laser cutters.	Oct 2019
	PINEWOOD DERBY -Used Autodesk Fusion 360 to mold a wooden block into an aerodynamic racecar -3D printed the car on a Replicator 2 3D printer using MakerBot printing software and PLA filament	JUNE 2019
EXPERIENCE	CARNEGIE MELLON ROCKET COMMAND - 3D modeled circuit boards and other electrical components - Contributed to Preliminary Design Review and the Critical Design Review for the NASA Student Launch competition	OCT 2019 – PRESENT
	FIRST ROBOTICS <i>Captain of the Hayfield Robotics team: Night Hawks</i> - Placed 12 th in the world out of 3,800 teams - Led prototyping, 3D modeling, and 3D printing efforts - Modeled and 3D printed protective casing for sensitive equipment on the robot.	AUG 2017 – JUNE 2019
	LEGO ROBOTICS <i>Mentor</i> -Taught elementary school students how to make and program basic functions for Lego robots	AUG 2018 – JUN 2019
SKILLS	- Software: Autodesk Inventor, SolidWorks, Python, MakerBot 3D printing software, CURA 3D printing software, AutoCAD, Fusion 360 - Machining: Laser Cutter, Band Saw, Drill Press, Belt Sander, Grinding Machine, Power tools.	
RELEVANT COURSEWORK	-Fundamentals of Mechanical Engineering, Fundamentals of Programing & Computer Science, Physics 2	