ROBOTICS

Skill Tree: Color in the boxes and level up your skills

Use for individuals or as a group by picking a colour each and coloring in a part of the box. Everyone's journey is different and you can interpret the goals flexibly. The aim is to inspire you to learn and try new things. Not everything needs to be completed.

ADVANCED

(set your own goal)
(set your own goal)
(set your own goal)
(set your own goal)
(set your own goal)
Participate in a robotics competition
Teach a class on robotics
Build robots that can work together
Build a robot that can recognise voice or guesture
Make a tutorial on a robot project
Design a custom motor controller
Build a CNC machine
Use soft robotics in a design
Use machine learning in a project
Design a custom PCB for a robot
Make a robot with metal parts
Build a battle bot in a team
Make a waterproof robot
Build a drone
Build a robot with lidar
Build a pick and place robot eg. LumenPnP
Build a drawing machine
Build a 3D printer
Use kinematics in a project
Join a robotics club or group
Contribute to an open source robotics project
Build an autonomous robot
Simulate your robot in software eg. Gazebo or V-REP
Visit a robot restaurant
Build a large open source robot, eg. InMoov
Make a robot dance
Make mods to an off the shelf robot or part
Use upcycled e-waste in a project
Use an LED matrix or screen in a robot
Build a robot with a camera
Control a robot with a teach pendant
Program a robot with the Robot Operating System
Use pneumatics in a build
Build a floating robot
Build an ant weight or similar battlebot
Use OpenCV in a project
Send commands wirelessly
Rebuild a robot after it breaks
Build a robot with wheels or tracks
Build a companion robot
Teach a friend a robotics skill
Make a CAD model of a robot project
Write software to run on a robot
Use a PID controller in a project
Calibrate a robot build
Use an IMU in a project
Use a game controller in a project
Read a book or attend a workshop
Build a biped robot eg. Ottobot
Build a Petoi or similar
3D print a robot part
Build a racing robot, eg. Donkeycar
Learn a CAD software
Use an infrared sensor in a project
Build a line following robot
Learn to use a multimeter
Build a robot with more than one motor
Learn to use a 3D printer
Use Raspberry Pi in a project
Make a cardboard robot
Learn about pwm control
Use an ultrasonic sensor in a project
Blink a light with Arduino
Control a servo motor
Learn to use a soldering iron
Make a cardboard automata
Build a robot from a kit
Learn about different kinds of motors

BASICS

START HERE

1 tile = 1 point

Total Score

Name: _____

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