

Why study robotics? How to program a robot in a simulator

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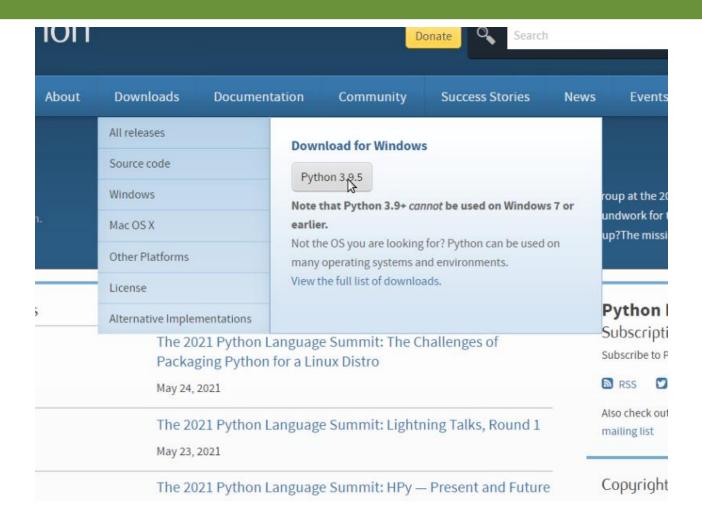


# Software requirements

You can get most of the talk just watching!

- Software to install
  - Webots
  - Python 3













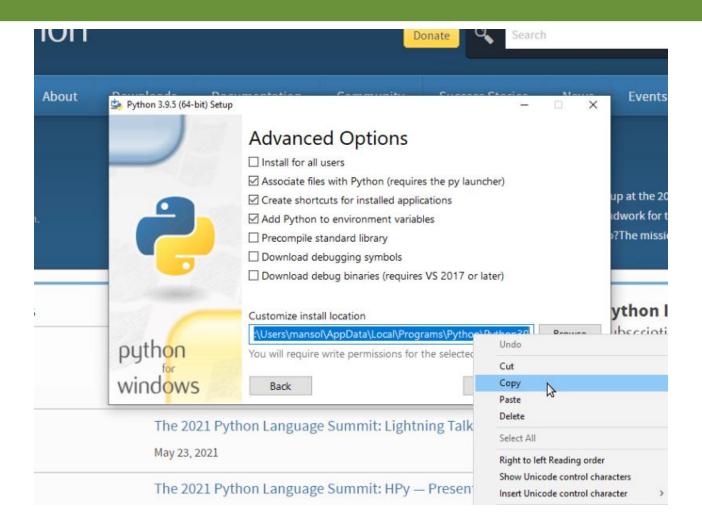


Uncheck 1st if you don't have permissions, check the 2nd SELECT "Customize installation"





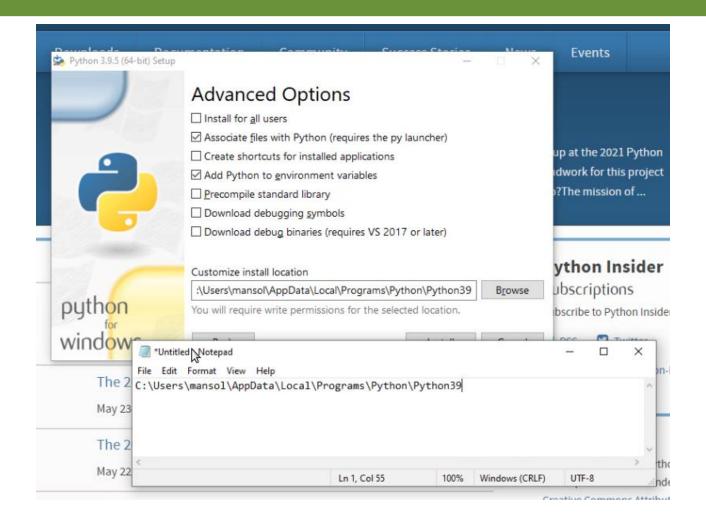
Uncheck "for all users" if you don't have permissions





**IMPORTANT** 

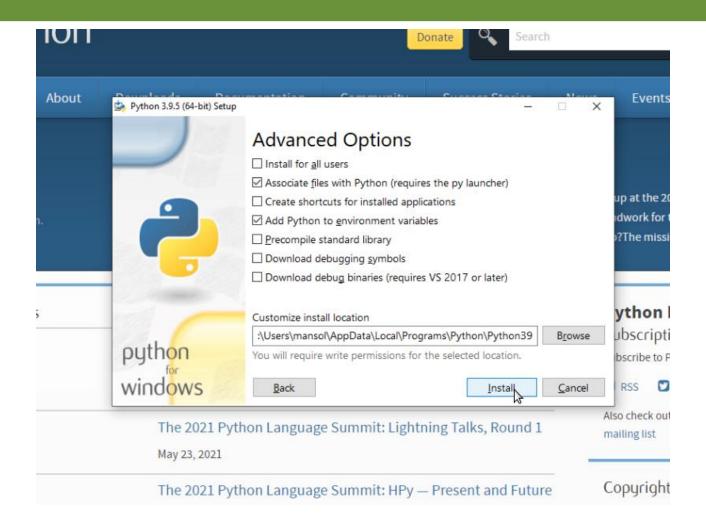
Make sure you copy and paste that location (e.g., notepad)





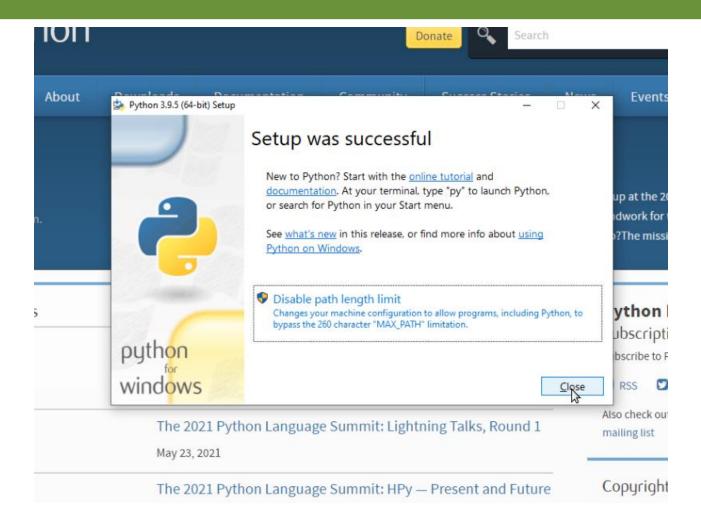
**IMPORTANT** 

Make sure you copy and paste that location (e.g., notepad)





"Install for all users" should not be checked "Add Python to environment variables" should be checked

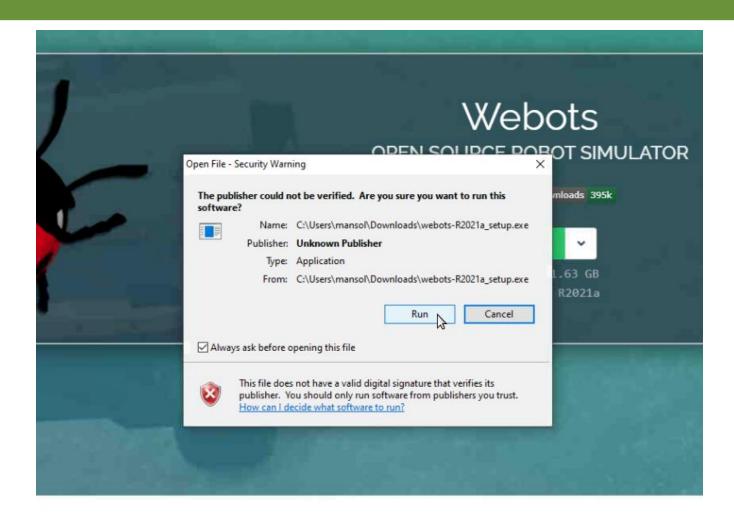




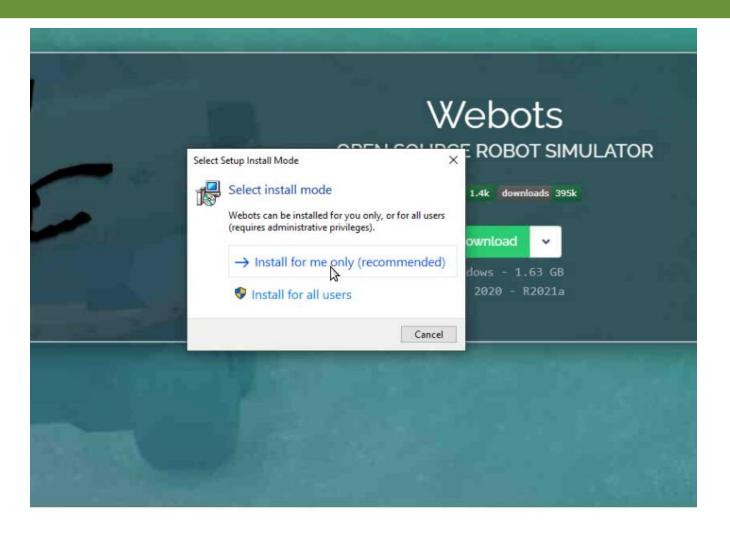




Download from http://cyberbotics.com This is going to take a while!

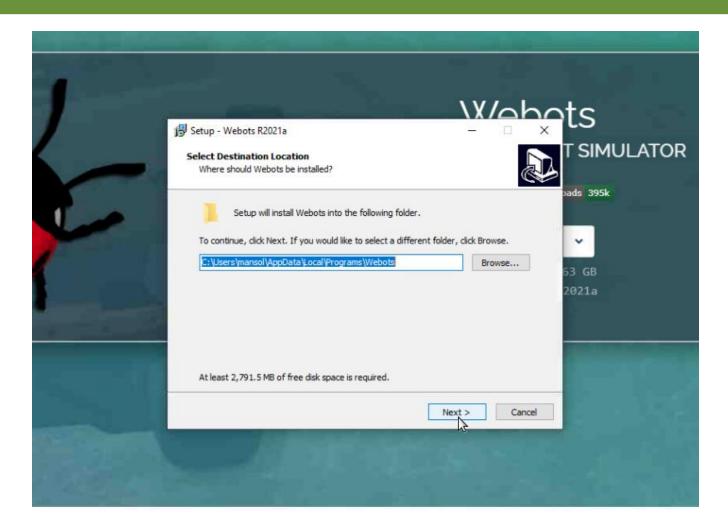




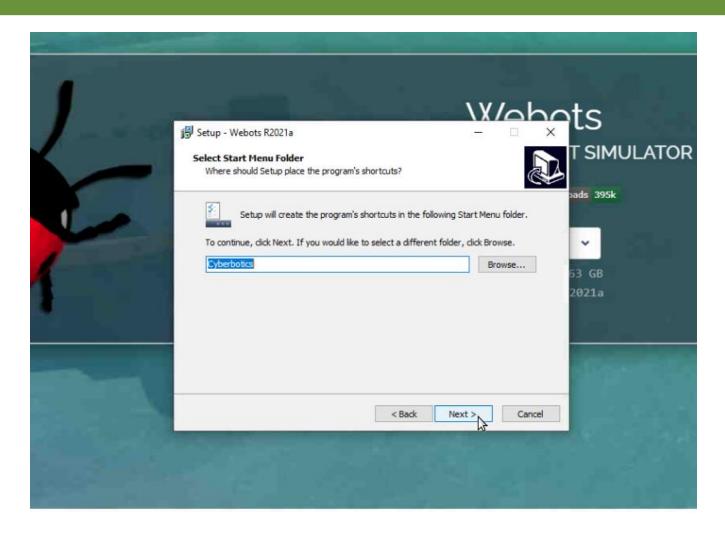




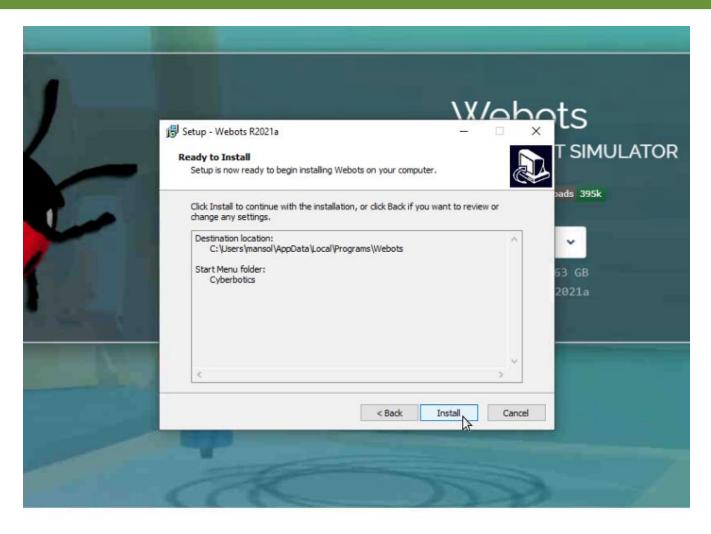
You can install for all users if you have permissions



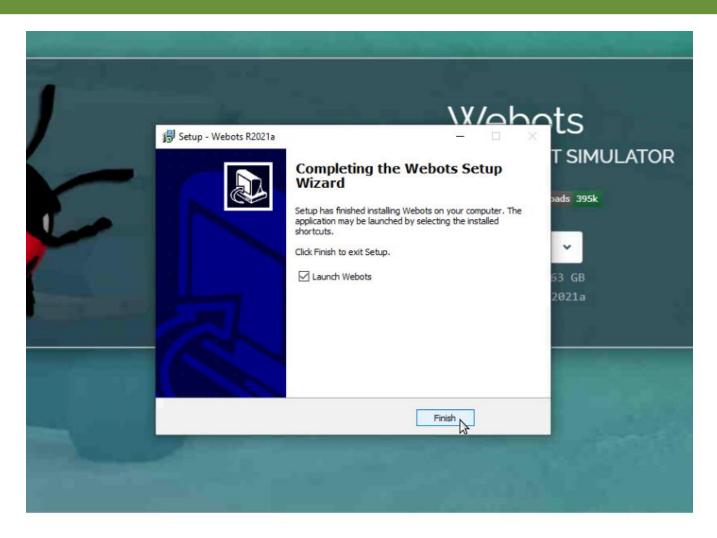






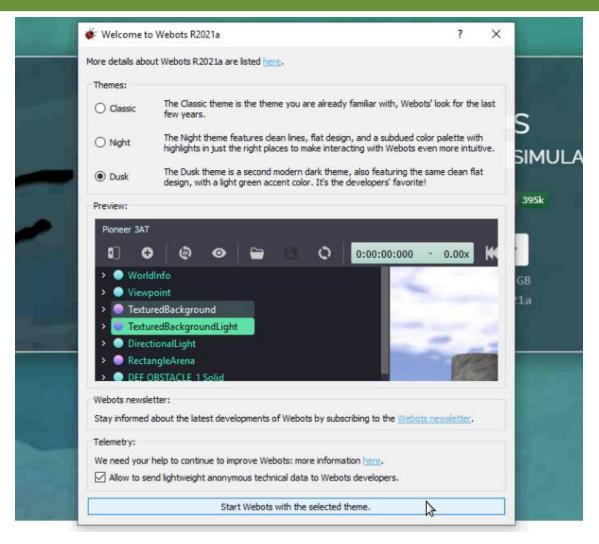






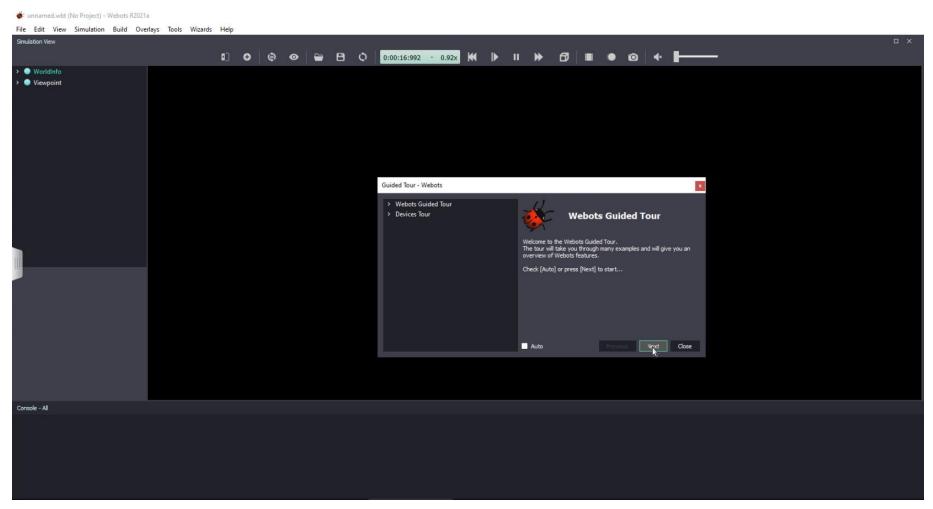


**Finish** 





This is just to select the theme, not very relevant



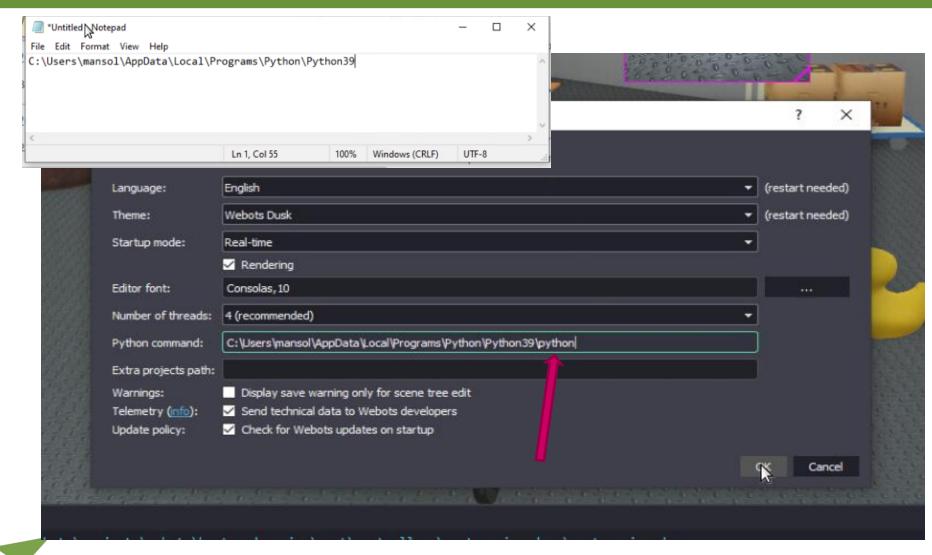


C:\Users\mansol\AppData\Local\Programs\Webots\projects\robots\boston\_dynamics\spot\worlds\spot.wbt (spc Build Overlays Tools Wizards Help Simulation Edit View Ctrl+B 3D View Spot Robot demo Ctrl+T Scene Tree 8 O Text Editor Ctrl+E > Worldinfo Documentation Viewpoint > TexturedBackground Restore Layout Ctrl+J TexturedBackgroundLight Clear All Consoles Ctrl+K RectangleArena New Console Ctrl+N > O Spot Edit Physics Plugin StraightStairs Preferences WoodenBox WoodenBox WoodenBox > PlasticCrate TrafficCone TrafficCone TrafficCone



Select "Tools", "Preferences" from the menu

**Aston University** 



Paste from the document we saved and append "\python" (without the quotes)

#### Download our base project

https://github.com/ljmanso/engineering\_live\_robotics/raw/main/line\_follower\_base.zip

https://bit.ly/3c8Yh7z

