

Bengkel Autonomous Robot Application : Donkey Car (Part 7)

Nur Akhyar bin Nordin



Part Time Makers



ayozzet

Sekadar perkongsian ringkas

Selain menggunakan Numpy sebagai subjek pengiraan, boleh juga gunakan pendekatan lain seperti..

1. Ambang Adaptif - “Adaptive Threshold”
2. Kontur - “Contour”
3. Kesan garisan dengan Transformasi Hough (Hough Transform)
4. Regresi Linear - “Linear Regression”

Penambahbaik akan datang

1. Tensorflow Lite
 2. Keras
 3. Simulasi
 4. ROS
-

Hipotesis (atau jangkaan)

Apa yang akan
berlaku kelak?

Mempercepatkan proses Python

1. Gunakan “Dictionary”
2. Gunakan “match...case” (seperti “switch...case”)
3. Mengurangkan “if...else”

+ 152 %	if and elseif (using ==)	Total time: 75 µs
+ 147 %	if, elseif and else (using ==)	Total time: 72 µs
+ 100 %	if and elseif (using ===)	Total time: 49 µs
+ 100 %	if, elseif and else (using ===)	Total time: 49 µs
+ 126 %	switch / case	Total time: 62 µs
+ 126 %	switch / case / default	Total time: 62 µs

Naik taraf “Donkey Car” anda

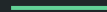
1. Camera - OV5467 (Wide Lens Module)
 - a. - Xbox Kinect Camera
 - b. - ZED stereo camera
2. Single Board Computer (SBC) - Raspberry Pi 4 / NVidia Jetson Nano / SolidRun
3. Servo - MG996R Metal Gear
4. Electronic Speed Controller - Racerstar 120A ESC Brushless (Waterproof Sensorless)
5. DC Motor - Racerstar 4076 Brushless Waterproof Motor (Sensorless) 120A 2000KV
6. Battery - 7.4V Li-Po 1500mAh 2S/25C

Rujukan lain

Setiap saintis menggunakan
kaedah eksperimen yang
berbeza

Pautan lain...

- [PyImageSearch.com](https://pysource.com/)
- [PythonProgramming.net](https://pythonprogramming.net/)
- [ComputerVision.zone](https://computer-vision.zone/)



Sekiranya ada “Part 2”

Menambahbaik “Donkey Car”

Donkey Car

Search docs

Home

USER GUIDE

Build a car.

Overview

Choosing a Car

Roll Your Own Car

Video Overview of Hardware Assembly

Parts Needed

Hardware

Software

Install the software.

Create Donkeycar App.

Calibrate steering and throttle.

Get driving.

Train an autopilot.

Dataset and pre-trained models

Donkey Simulator.

Virtual Race League.

Mobile app

PARTS

About

Actuators

Controllers

Odometry/encoders

Keras

Stores

IMU

Lidar

OLED

GitHub

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Docs » User Guide » Build a car.

Edit on GitHub

How to Build a Donkey®

- Overview
- Parts Needed
- Hardware:
- Step 1: Print Parts
- Step 2: Clean up parts
- Step 3: Assemble Top plate and Roll Cage
- Step 4: Connect Servo Shield to Raspberry Pi
- Step 5: Attach Raspberry Pi to 3D Printed bottom plate
- Step 6: Attach Camera
- Step 7: Put it all together
- Software

Overview

The latest version of the software installation instructions are maintained in the [software instructions](#) section. Be sure to follow those instructions after you've built your car.

Choosing a Car

There are 4 fully supported chassis all made under the "Exceed" Brand:

- Exceed Magnet [Blue](#)
- Exceed Desert Monster [Green](#)
- Exceed Short Course Truck [Green, Red](#)
- Exceed Blaze [Blue, Yellow, Wild Blue, Max Red](#)

Note: If they are out of stock on Amazon, you can find the cars at the [Exceed Website](#)

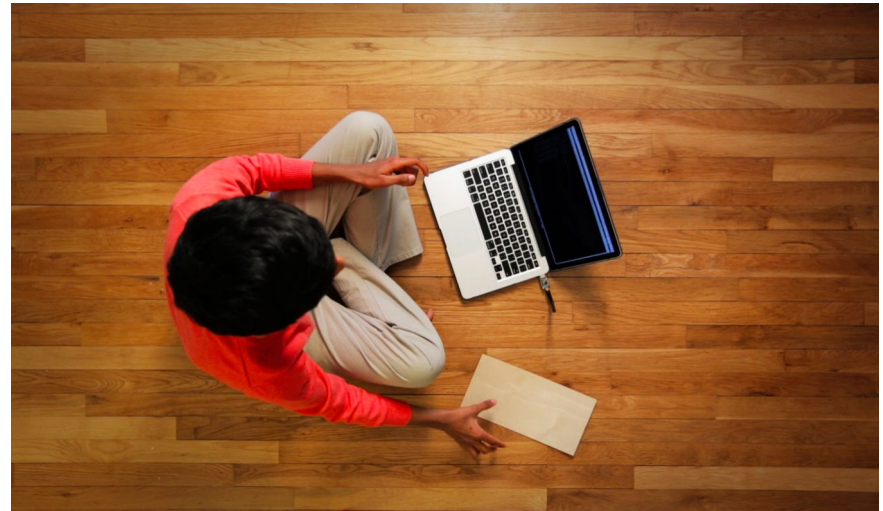
These cars are electrically identical but have different tires, mounting and other details. It is worth noting that the Desert Monster, Short Course Truck and Blaze all require adapters which can be easily printed or purchased from the [donkeycar store](#). These are the standard build cars because they are readily available.

Aha!

Penerokaan anda

Gunakan OpenCV untuk perkara lain..

1. Pengecaman Objek
2. Kepintaran Buatan - AI
3. Pembelajaran Mesin - ML



Belajar dan buat
perkara baru setiap
hari.

Kesimpulan

Anda tentukan sendiri....

Apa yang akan anda lakukan seterusnya?

Cari pendekatan lain dan berkongsi dengan orang lain

