

15. 人工智能汽车



nǐ tīng shuō guò rén gōng zhì néng ma rén gōng zhì néng zhǔ yào shì zhì lì yú kāi
你听说过人工智能吗？人工智能主要是致力于开
fā diàn nǎo chéng shì shǐ jī qì jù bèi rén lèi de sī wéi zhè zhǒng xīn jì shù fā zhǎn
发电脑程式，使机器具备人类的思维。这种新技术发展
dào xiàn zài rén jī duì yì zhì néng jiā jū tóng shēng chuán yì děng chǎn pǐn rú yǔ hòu
到现在，人机对弈、智能家居、同声传译等产品如雨后
chūn sǔn bān céng chū bù qióng tā chéng wéi le rén lèi zhì huì de "róng qì"
春笋般层出不穷。它成为了人类智慧的“容器”。

shì xiǎng yì xiǎng rú guǒ nǐ yǒu hěn duō jiā wù huó què yǒu shí gè jī qì rén wéi
试想一下，如果你有很多家务活，却有十个机器人为
nǐ dài láo nà me nǐ bú shì yǒu gèng duō de shí jiān qù zuò zì jǐ xiǎng zuò de shì
你代劳，那么，你不是有更多的时间去做自己想做的事？
kě yǐ kuài kuài lè lè dì shēng huó ma
可以快快乐乐地生活吗？

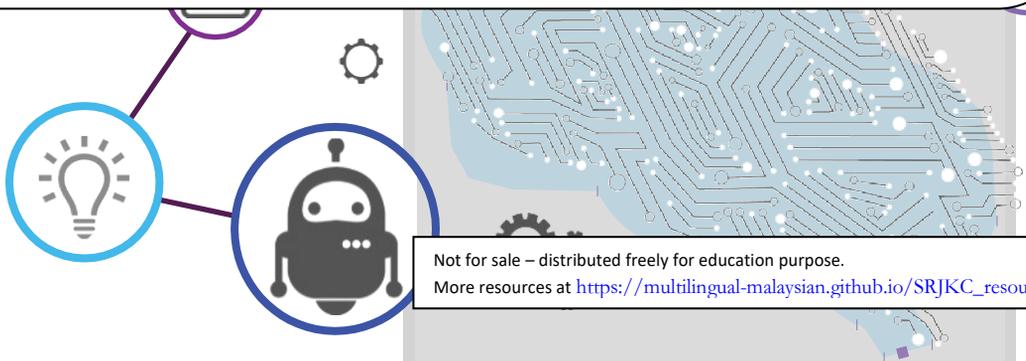
yǒu jiàn yú cǐ gè háng gè yè fēn fēn jī jí de yǔ rén gōng zhì néng jié hé qí
有鉴于此，各行各业纷纷积极地与人工智能结合，其
zhōng qì chē shì zhòng yào fā zhǎn zhī yī
中汽车是重要发展之一。

The Artificial Intelligence car

Have you heard of **artificial intelligence**? Artificial intelligence is mainly used in developing computer programs to make machines have **human thinking**. With the development of this new technology, products such as man-machine games, **smart homes**, and real-time language translation have sprung up like bamboo shoots after the rain (in Malay: Bagai cendawan tumbuh selepas hujan). It has become the "**vessel**" of human wisdom.

Just think about it, if you have a lot of housework, but ten robots do it for you, then don't you have more time to do what you want to do? Can you live happily?

In view of this, all sectors are actively implementing artificial intelligence, among which automobile is one of the important developments.



wèi shén me qì chē chéng wéi zhòng yào de fā zhǎn zhī yī yuán lái qì chē zhè
为什么汽车成为重要的发展之一？原来，汽车——这
ge bèi chēng wéi gǎi biàn shì jiè de zhòng yào jī qì què yě gěi rén men dài lái le jū gāo
个被称为改变世界的重要机器，却也给人们带来了居高
bù xià de chē huò shì gù
不下的车祸事故。

rén gōng zhì néng rú hé zài qì chē yè bāng zhù rén men jiàng dī chē huò lǜ tā kě yǐ
人工智能如何在汽车业帮助人们降低车祸率？它可以
bàn yǎn shén me jué sè tōng guò zài chē liàng shàng ān zhuāng fǔ zhù jià shǐ xì tǒng kě yǐ
扮演什么角色？通过在车辆上安装辅助驾驶系统，可以
jí shí zhǎng wò chē liàng xìn xī jí xíng shì zhuàng tài kě yǐ zì dòng pàn duàn chē liàng dāng qián
及时掌握车辆信息及行驶状态，可以自动判断车辆当前
shì fǒu cún zài chāo sù wéi guī děng xiàn xiàng tóng shí hái kě yǐ tōng guò ān zhuāng hóng
是否存在超速、违规等现象。同时，还可以通过安装红
wài shè xiàng tóu duì jià shǐ yuán de jià shǐ zhuàng tài jìn xíng zhì néng shí bié rú guǒ jià shǐ
外摄像头对驾驶员的驾驶状态进行智能识别。如果驾驶
yuán chū xiàn s xíng xíng shǐ guǐ jì yǐ jí dǎ hā qiǎn děng biǎo qíng nà me xì tǒng huì zì dòng
员出现S型行驶轨迹以及打哈欠等表情，那么系统会自动
duì jià shǐ yuán jìn xíng tí xǐng hé yù jǐng bì miǎn pí láo jià shǐ suǒ dǎo zhì de shì gù fā
对驾驶员进行提醒和预警，避免疲劳驾驶所导致的事故发
shēng
生。

Why is automobile one of the important developments? It turns out that cars - an important machine that revolutionized the world, has also brought us a high number of road accidents.

How can artificial intelligence help humans reduce the rate of road accidents in the automobile industry? What role can it play? By installing the assisted driving system on the vehicle, the vehicle information and driving status are available in real-time, and the system can automatically judge whether the vehicle is currently speeding or violating any traffic regulations. At the same time, the driver's driving state can be intelligently identified by installing an infrared camera. If the driver shows an S-shaped driving trajectory and yawning expressions, the system will automatically remind and warn the driver to avoid accidents caused by fatigue driving.

Note: *Fatigue* means very tired





rén gōng zhì néng qì chē jù yǒu chāoqiáng de fēn xī lì
 人工智能汽车具有超强的分析力

dāng rén men zài jiāo wài mí lù jiāo lǜ huāngzhāng shí dé dào rén gōng zhì néng dǎo háng xì
 当人们在郊外迷路，焦虑慌张时得到人工智能导航系
 tǒng xié zhù de huà sī jī biàn néng ān rán dī dá mù dì dì cǐ xì tǒng tōng guò chāoqiáng
 统协助的话，司机便能安然抵达目的地。此系统通过超强
 de fēn xī chāo dà guī mó de jì suàn néng gǎn yīng jiāo tōng wǎng luò bìng zhǐ shì sī
 的分析、超大规模的计算，能感应交通网络，并指示司
 jī zhèng què de xíng shǐ lù xiàn
 机正确的行驶路线。

chú le zhì néng dǎo háng xì tǒng wú rén jià shǐ qì chē yě shì zhì néng qì chē de yī
 除了智能导航系统，无人驾驶汽车也是智能汽车的一
 zhǒng zhè zhǔ yào yī kào chē nèi de zì dòng jià shǐ yí lái shí xiàn wú rén jià shǐ de mù
 种。这主要依靠车内的自动驾驶仪来实现无人驾驶的目
 biāo
 标。

When people get lost in the suburbs and feeling anxious, they can be assisted by the artificial intelligence navigation system, the driver can then reach the destination safely. Through powerful analysis and large-scale computation, this system can detect the traffic conditions and direct drivers to the correct driving route.

In addition to intelligent navigation systems, driverless cars are also a type of smart cars. This mainly relies on the autopilot system in the car to achieve the goal of unmanned driving.



wú rén jià shǐ de zì dòng huà bā shì
无人驾驶的自动化巴士



wú rén jià shǐ qì chē
无人驾驶汽车

jù xī yǒu de guó jiā yǐ jīng zài dà xué xiào yuán nèi tuī chū wú rén jià shǐ de zì dòng huà bā shì fú wù fāng biàn shī shēng hé qí tā fǎng kè wǎng fǎn sù shě jiào shì hé qí tā xiào yuán shè shī
据悉，有的国家已经在大学校园内推出无人驾驶的自动化巴士服务，方便师生和其他访客往返宿舍、教室和其他校园设施。

zhè zhǒng xiǎo xíng bā shì wǎng hòu yě kě yǐ nà rù shǒu jī yìng yòng chéng shì lǐ fāng biàn yòng hù chá xún zhè xiàng jiāo tōng gōng jù jù tǐ de chū xíng shí jiān hé dì diǎn yí dàn yòng hù shū rù suǒ zài chù hé mù de dì hòu yìng yòng chéng shì jiù huì jìn xíng fēn xī gēn jù lù kuàng xiāo xī hé qí tā shù jù jié hé gè zhǒng jiāo tōng gōng jù de chū xíng lù xiàn tí gòng xuǎn zé biàn jié shěng shí hái jié shěng rén lì zī yuán
这种小型巴士往后也可以纳入手机应用程序里，方便用户查询这项交通工具具体的出行时间和地点。一旦用户输入所在处和目的地后，应用程序就会进行分析。根据路况消息和其他数据，结合各种交通工具的出行路线提供选择，便捷、省时还节省人力资源。

It is reported that some countries have launched unmanned automated bus services on university campuses to facilitate the transportation of teachers, students and other visitors to and from dormitories, classrooms and other campus facilities.

This kind of minibus can also be included in the mobile phone App in the future, so that users can check the specific travel time and location of this mode of transportation. Once the user enters their location and destination, the app analyses it. It can provide various travel options according to traffic condition and other data, combined with travel routes of various kinds of transport. This is also convenient, saves time and optimizes human labour and resources.

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More resources at https://multilingual-malaysian.github.io/SRJJC_resources/

cóng shì jì nián dài kāi shǐ měi guó yīng guó dé guó děng fā dá guó
从20世纪70年代开始，美国、英国、德国等发达国家
jiā yǐ kāi shǐ jìn xíng wú rén jià shǐ qì chē de yán jiū bìng zài kě xíng xìng hé shí yòng
家已开始进行无人驾驶汽车的研究，并在可行性和实用
huà fāng miàn dōu qǔ dé le tū pò xìng de jìn zhǎn
化方面都取得了突破性的进展。

zhōng guó cóng shì jì nián dài kāi shǐ jìn xíng wú rén jià shǐ qì chē de yán jiū
中国从20世纪80年代开始进行无人驾驶汽车的研究，
zài 1992 nián chéng gōng yán zhì chū zhōng guó dì yī liàng zhēn zhèng yì yì shàng de wú rén jià shǐ
在1992年成功研制出中国第一辆真正意义上的无人驾驶
qì chē gǒng gù le fā zhǎn xìn xīn
汽车，巩固了发展信心。

gēn jù měi guó xīn wén méi tǐ bào dǎo shì jiè shàng zuì xiān jìn de wú rén jià shǐ qì
根据美国新闻媒体报导，世界上最先进的无人驾驶汽
chē yǐ jīng cè shì xíng shǐ jìn wǔ shí wàn gōng lǐ qí zhōng zuì hòu bā wàn gōng lǐ shì zài
车已经测试行驶近五十万公里，其中最后八万公里是在
méi yǒu rèn hé rén wéi de ān quán gān yù cuò shī xià wán chéng de
没有任何人为的安全干预措施下完成的。

suī rán xiàn jiē duàn jì shù shàng wèi chéng shú shèn zhì yǒu de rén kāi shǐ dān xīn rén gōng
虽然现阶段技术尚未成熟，甚至有的人开始担心人工
zhì néng yǒu yì tiān huì chāo yuè rén lèi de zhì huì wēi xié rén lèi de zhǔ dǎo dì wèi yǔ cún
智能有一天会超越人类的智慧，威胁人类的主导地位与存
wáng bú guò zhǐ yào wǒ men shàn yòng rén gōng zhì néng duì rén gōng zhì néng yǒu yì kē jìng
亡。不过，只要我们善用人工智能，对人工智能有一颗敬
wèi de xīn wǒ men yí dìng kě yǐ yǔ jī qì rén gōng wú bìng qiè chéng wéi gòng wǔ guò
畏的心，我们一定可以与机器人共舞，并且成为共舞过
chéng zhōng de zhǔ dǎo ràng wǒ men shì mù yǐ dài rén gōng zhì néng qì chē pǔ jí huà nà
程中的主导。让我们拭目以待，人工智能汽车普及化那
tiān de lái lín ba
天的来临吧！

Since the 1970s, developed countries such as the United States, the United Kingdom, and Germany have begun **research** on unmanned vehicles, and have **made breakthroughs** in feasibility and practicality.

China began research on unmanned vehicles in the 1980s, and successfully developed China's first truly unmanned vehicle in 1992, which consolidated its confidence for future development.

According to US news media reports, the world's most advanced driverless car has been tested for nearly half a million kilometers, the last 80,000 kilometers of which were completed without any human **safety intervention**.

Although the technology is **not mature yet** at this stage, some people even worry that artificial intelligence will **surpass** human intelligence one day, **threatening** the dominance and survival of human beings. However, as long as we **make good use** of artificial intelligence and have a healthy respect towards it, we can definitely dance with robots and become the one who leads. Let us **anticipate** the day when artificial intelligence cars **are widely used**!

yì jiāng nán
忆江南 唐·白居易

jiāng nán hǎo fēng jǐng jiù céng ān
江南好，风景旧曾谙。

rì chū jiāng huā hóng shèng huǒ
日出江花红胜火，

chūn lái jiāng shuǐ lǜ rú lán
春来江水绿如蓝。

néng bù yì jiāng nán
能不忆江南。

