介绍小米su7

这是什么车，电车。

很多都在造车。

为什么造电车（优点）

电车充电难题（缺点）

为什么用机器学习

I’m sure most of you have seen or heard of this car (if you’re Chinese, maybe). This car was released late last month, and quickly gained a lot of attention. It is the Xiaomi su (Speed Ultra) 7. Xiaomi is a company known for selling smart phones, but the CEO decided to build a car 2021, and this is the first car they built.

We all know that automobile(car) manufacturing is a long-established industry, but why has it become popular again? what’s new in this car? Because it is a EV(Electric Vehicle), which means there is a battery in the car and the car is powered by the electric. In contrast. **conventional internal combustion engine (ICE) vehicles** powered by gasoline.

My research topic is about EV charging behavior.

EVs are considered to be the frontrunners in providing clean source of transportation.

greenhouse emissions, carbon emissions, fuel consumption

charging stations

Unlike gas stations for ICE vehicles, where the vehicles can get refueled in minutes, EVs often require hours to recharge

* long time to charge, therefore causing great inconvenience.
* owners do not have the capacity to charge their cars **at home**
* A mobile phone has only a few tens of watts of charging power, while a tram needs hundreds of kilowatts. Due to the high power needs of the EVs, integrating them on massive scale will place huge constraints on the **power distribution grid.**

Thus, the **optimal solution** is to better **manage the scheduling of charging stations**

ML can solve problems well. Also, many studies have yielded good results.

For example, we want to predict the charging time, then it can be regarded as regression problem, which is a simple patten in ML.

After analyzing the charging behavior, we can design better algorithms for electric distribution, arrangement, and improving charging productivity.

Limitation: **data insufficient**

Anyway, back to the beginning, except Xiaomi, many companies are building EV. And countries had released policy for the transformation.

I believe in the future, research about EV charging will become more and more popular, and the problem like data insufficient will be solved.