

## 1. A self-driving car:

### Input:

- A map of the area the car will be driving in
- Sensor data, such as cameras and LIDAR, to detect obstacles, other vehicles, and pedestrians
- Information about the car's current location and speed
- Input from the car's GPS system

### Output:

- Commands to the car's steering, acceleration, and braking systems to navigate the road
- Warnings or alerts to the driver or passengers if any obstacles are detected
- Information about the car's estimated arrival time at its destination

## 2. Netflix recommendation system:

### Input:

- Data about a user's viewing history, ratings, and preferences
- Data about other users' viewing histories and ratings
- Information about the content available on Netflix

### Output:

- Recommendations for TV shows and movies that the user may enjoy based on their viewing history and preferences
- Suggestions for new content to watch based on the user's viewing habits and the ratings of other users with similar interests
- Personalized collections of TV shows and movies that the user may be interested in based on their viewing history

### 3. Signature recognition:

#### Input:

- An image of a signature to be analyzed
- Information about the signer and the context in which the signature was made

#### Output:

- Verification of the signature's authenticity
- Comparison of the signature to a database of known signatures to identify the signer
- Analysis of the signature's characteristics to determine if it was made under duress or if it is a forgery

### 4. Medical diagnosis:

#### Input:

- Symptoms reported by the patient
- Results of any medical tests or imaging studies
- Patient medical history

#### Output:

- A diagnosis of the patient's condition
- Recommendations for treatment options
- Referral to a specialist for further evaluation or treatment