Intro to Machine Learning

For each of the following examples, describe possible inputs and outputs:

A self-driving car
Inputs - Sensory data i.e. audio/visual perception from cameras or microphones, sonar, lidar, radar, GPS, routing and traffic data.

Outputs - Mechanical outputs such as acceleration or deceleration, changing direction of the wheels, applying the brakes, changing gears, turning on front and rear lights or indicating.

Netflix recommendation system
Inputs - Content the user has previously watched, information about style, type, genre, language etc., thumbs up / thumbs down style feedback system, highly rated, new and popular content.

Outputs - Video content that best fits user preferences and highly recommended titles.

Signature recognition
Inputs - The signature to verify and a trusted example of the signature to compare against. Trained against a variety of signatures including forged, blank or incorrect signatures.

Outputs - A verification - is the signature legitimate or not? Possibly with a likelihood of error.

Medical Diagnosis
Inputs - Medical imagery such as X-ray, MRI, Sonography, Electrograms. Patient data such as age, gender, ethnicity, medical history, genetic data. Symptoms or difficulties faced by patients.
Trained against human doctors on real world examples to verify efficacy.

Outputs - A ranked list of the likely diseases or conditions that match the observations found in the inputs.