## Nissan autonomous Robot Eporo

Eporo simulates a school of fish using three basic rules to maintain a safe distance.





**Traveling Side-by-side** Approaching

**Collision Avoidance** 

### **Fish Sensors**

### Lateral line sense

A sensory organ extending from the fish's head to tail maintains the distance between the fish and its nearest neighbor.

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# **Eporo sensors**

### **Measurement of Close Objects**

Laser range finder receives reflections from emitted lasers, and distance to obstacles is measured from the arrival time.

0 degrees

Angle of detected obstacle

### **Sense of sight**

A 330 degree field of peripheral vision enables fish to keep constant distance to the surrounding neighbor.



### **Recognition of Surrounding Objects**

Ultrawide band communications detect distance with a high degree of accuracy, receiving and sending data simultaneously.

