

Maestro: A Gestural Interface for Scratch Programming



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Wiimote data can be mapped onto standard Scratch mouse or keyboard inputs.

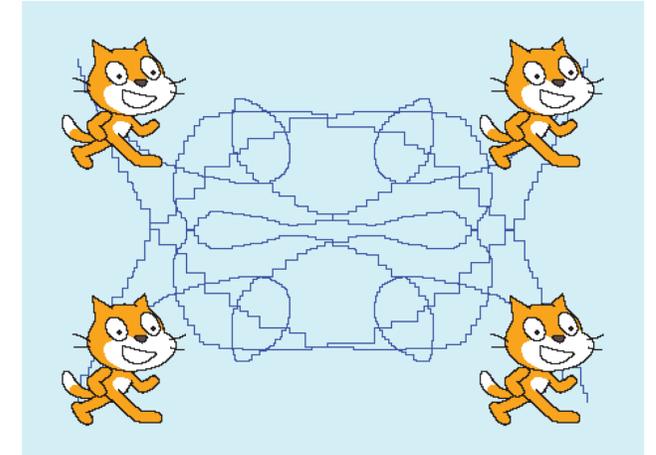
- **3 axes of rotation (pitch, yaw, roll)**
- **3-axis accelerometer**
- **IR tracking**
- **buttons**



Like the PicoBoard, Maestro extends the reach of Scratch into the world and points towards many questions:

- What is embodied programming and what can this teach us about it?
- How can the act of programming strengthen understanding of real world phenomena?
- Does this novel selection of richly continuous inputs raise the ceiling of programming complexity?
- How do learners offload cognitive and conceptual work into the physical world?

The Kaleidoscope



How can rotational input or IR tracking be put to creative art-making use?

Exploring Reasoning about Force and Gravity



Using accelerometer input, learners can program authentic physical interactions with existing or new Scratch kinematic models.