Learning to walk in complex environments



- For complex environments learning a single gait is not sufficient (e.g., with steps, rough terrain)
- Different gaits must be learned and combined
- How to learn a library of gaits efficiently?
- How to combine and switch between them?





Learning to balance with the iCub

- When pushed, most robots must • estimate the force applied from sensors at the joints
- The iCub has ~6000 skin sensors
- Is it possible to create reactive controls (i.e. reflexes) from the skin?
- Final goal: \bullet demonstration of the real robot

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iCub Telecontrol

- Teleoperation can be very complex using traditional methods
- Can we have a more natural control?
- Kinect v2 to perform human movements
- Oculus Rift to see what the robot sees









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